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ABSTRACT

The directory represents a compilation of 61 institutions of higher education in the United States that offer a degree program or a concentration within a degree program in any of the following related areas: outdoor education, environmental education, conservation education, or environmental interpretation. All institutions are indexed alphabetically by state. Each entry includes the following information: name of the institution; contact person with his mailing address and phone; academic location; degree(s) offered in outdoor education; number of full-time and part-time faculty, along with a description of their degrees and rank; founding date of department and degree program(s); credit hour requirements; outdoor education course titles and descriptions; number of students enrolled in and graduated from each program; approximate number of total students in various degree programs and percentage of those students in outdoor education programs; future developments forecast by the university; and a description of any field campus or environmental education center used in the university program(s). (Author)

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DIRECTORY OF OUTDOOR EDUCATION DEGREE PROGRAMS
IN HIGHER EDUCATION

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

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by

Russel E. Bachert, Jr.

ERIC/CRESS

June 1977

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EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
CLEARINGHOUSE ON RURAL EDUCATION AND SMALL SCHOOLS (CRESS)

New Mexico State University

Las Cruces, New Mexico 88003

FOREWORD

Society, in general, has become increasingly aware in recent years of the need to conserve our natural resources. Environmental crises are a topic of conversation in our daily lives. Professional educators have begun to recognize the potential that out-of-classroom learning environments have as a necessary and valuable instructional resource.

Institutions of higher education soon recognized that if they were to serve the needs of society they should develop curriculum offerings to meet these needs. Thus, a variety of programs at the undergraduate and graduate levels have evolved. These programs run the gamut from short courses, workshops and seminars, to areas of concentration or specialization, to full-fledged degree programs. The diversity of programs available is oftentimes overwhelming and somewhat confusing to the student searching for a particular curriculum or area of specialization in a particular section of the country.

Russel E. Bachert, Jr., while pursuing a master's degree in outdoor teacher education at Northern Illinois University, early recognized the need to sort out the various programs available in the general areas of environmental, conservation, and outdoor education. He undertook an independent study to survey colleges and universities with E.C.O. Education curricular offerings. This study ultimately took the form of a Directory of Degree Programs Related to Conservation, Ecology, Environmental Education, Environmental Science, Outdoor Education, and Natural Resources, published by Interstate Printers & Publishers, Inc., Danville, Illinois, in 1971.

Since that time new programs have evolved. Other programs have been expanded; some have been phased out. Obviously the need exists for a new, updated directory. This publication should be a useful reference tool to the serious student, as well as to professionals in the fields of environmental, conservation and outdoor education who want to know what is available, where, in higher education.

- Donald R. Hammerman, Past Chairman
Council on Outdoor Education & Camping

PREFACE

In 1976 the author was asked by ERIC/CRESS, the government clearinghouse on outdoor education, to develop this directory. Dr. Everett D. Edington, Director of the Educational Research Information Center, stated at that time:

The purpose of this document is to develop a listing and description of outdoor education programs in institutions of higher education, with an emphasis on training educational personnel. The proposed audience is prospective students, outdoor educators, and employers.

An initial invitational letter and sample survey form was mailed to over 275 institutions. The mailing list represented a composite gleaned from several available sources. Any institution where it was either suspected or known that a degree program(s) existed was encouraged to respond. As a result of the 95 surveys returned, it was determined that 64 warranted inclusion in the directory based upon the initial guidelines set forth in the initial invitational letter.

Those guidelines that acted as the criterion for determining inclusion in the directory were as follows:

1. A completed survey form must be completed and returned within sufficient time.
2. The institution responding must be located in the United States.
3. The directory will include those degree programs in outdoor education, environment, education, conservation, and/or environmental interpretation.
4. The directory will also include any program(s) using the above descriptors as titles for concentrations within other degree programs.

It should be noted that a number of institutions responded who did not meet the afore-mentioned criterion and were therefore not included.

Every attempt was made to carefully edit each response so that a uniformity existed within the directory. Because of the diversity of degree programs described herein and the unique way each institution responded to the survey, inconsistencies in the way data is handled will be noted.

This directory should serve as a guide to those conducting further research on outdoor education programs in higher education. Students and counselors who seek to direct students looking toward academic preparation in outdoor education can use the directory as a source book. Professionals in the field can consult it as a means of staying in contact with their colleagues and furthering the state of outdoor education.

Development of such a directory is an endless task. Certainly there are other institutions having programs that should have been included, but who were not discovered for one reason or another. With time, new programs will be instituted and others will cease to exist. It is only with the sincere desire of the professional community to have such a directory that it came into existence, and continued support that many updates and revisions will take place.

If you have a program(s) that warrants inclusion in this directory, or want to update or amend data already included, please write to:

Dr. Russel E. Bachert, Jr.
Assistant Professor of Outdoor/Environmental Education
Division of Recreation
University of North Carolina at Greensboro
Greensboro, North Carolina 27412

7 - Russel E. Bachert, Jr.
March 1, 1977

ABSTRACT

The directory represents a compilation of institutions of higher education in the United States that offer a degree program or a concentration within a degree program in any of the following related areas: outdoor education, environmental education, conservation education, or environmental interpretation. All institutions are indexed alphabetically by state. Each entry includes the following information: (1) name of institution; (2) contact person with his mailing address and phone; (3) academic location; (4) degree(s) offered in outdoor education; (5) number of full-time and part-time faculty, along with a description of their degrees and rank; (6) founding date of department and degree program(s); (7) credit hour requirements; (8) outdoor education course titles and descriptions; (9) number of students enrolled in and graduated from each program; (10) approximate number of total students in various degree programs and percentage of those students in outdoor education programs; (11) development forecast by university; and (12) a description of the campus environmental education center used in the university program(s).

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ARIZONA STATE UNIVERSITY

1. Name of Contact Person, Title, Location, Mailing Address and Phone:

Dr. Frederick A. Staley

Associate Professor of Elementary Education

B 203A Pav

Arizona

Tempe, Arizona 85281

Phone: 602/965-3133

2. Administrative Location:

College of Education

Department of Elementary Education

3. Degree(s) Offered in Outdoor Education:

M.A. - Elementary Education (Emphasis in Outdoor Education)

Ed.S. - Elementary Education (Emphasis in Outdoor Education)

ED.D. or Ph.D. - Elementary Education (Emphasis in Outdoor Education)

4. Total Number of Faculty, Full-time and Part-time:

Full-time: 0

Part-time: 1

5. Faculty Status and Education of Outdoor Education Faculty,

Full-time and Part-time:

Part-time:

Staley, Frederick A., Associate Professor

B.S. - Western Michigan University (Elementary and Outdoor Science Education)

M.A. - Western Michigan University (Elementary School Administration and Supervision)

Ph.D. - Michigan State University (Elementary-Science and Outdoor Education)

6. Date Department Founded and Date Degree Program(s) Founded in Outdoor Education

1961 - Department of Elementary Education

1975 - Emphasis in Outdoor Education

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

B.A. - none; outdoor education experiences are incorporated in science content courses (6 semester hours) and methods courses (42 semester hours). Undergraduate elementary education majors must also have an academic specialization of 27 semester hours in one, two, or three areas. Outdoor Education related courses may comprise this specialization.

M.S. - Elementary Education - 30 semester hours, 15 hours in outdoor education and related areas

Ed.S. - Elementary Education - 60 semester hours, 30 hours in outdoor education and related areas

Ed.D. or Ph.D. - Elementary Education - 92 semester hours, 30 hours in outdoor education and related areas

8. Outdoor Education Course Titles and Descriptions:

Physical Science for Elementary Teachers: Concepts and processes from current elementary science curricula. Features several

day field trips and one weekend outdoor education experience.

Biological and Earth Science for Elementary Teachers: Concepts and processes from current elementary science curricula. Features several short field trips and a weekend experience at Camp Tontozona.

Teaching Science to Children: Methods and materials for inquiry-oriented science for elementary school children. Features experience at Camp Tontozona and an opportunity to plan and implement a four day integrated outdoor education experience for elementary school children at Camp Tontozona.

Field Ecology: The planning, preparation and implementation of two weeks of outdoor education experiences at Camp Tontozona for elementary and/or secondary school students.

Camp Program Activities and Skills: Outdoor cookery, nature crafts, campcrafts, story-telling, dramatics, songs and music, overnight trips. May include American Camping Association national certification in campcraft skills.

School Camping and Outdoor Recreation: Relationship of outdoor recreation to school camping. Planning and operating a school camp. Exploring the increased interest, problems, and concern for outdoor recreation in our society.

Outdoor Education in the Elementary Curriculum: Interdisciplinary approach to the use of various outdoor settings (school site, parks and recreation areas, resident school camps, nature centers and various natural and man-made areas) as laboratories for

classroom-related experience, study, observation, inquiry, research and recreation.

It is by design that the College of Education and Department of Elementary Education do not consider Outdoor Education to be a specific discipline. Rather, it is considered a way of learning in an informal, interdisciplinary environment. Outdoor Education experiences do play a significant role in the preservice preparation of elementary school teachers. However, for those inservice teachers who have not had these kinds of preservice experiences or who wish additional experience in learning to use the outdoors with children, there is also one interdisciplinary course and an option to specialize in Outdoor-Environmental Education as part of four different graduate degree programs in Elementary Education. The graduate programs permit students to select courses from a variety of departments in order to meet their own needs and interests.

9. Total Number of Students Graduated to Date in Outdoor Education

Program(s):

- 5 M.A. - Elementary Education (Emphasis in Outdoor Education)
- 0 Ph.D. or Ed.D. - Elementary Education (Emphasis in Outdoor Education)

10. Approximate Number of Total Students in Various Degree Programs and

Percentage of Those Students in Outdoor Education Program(s):

- 6 M.A. - Elementary Education (Emphasis in Outdoor Education)
- 1 Ph.D. or Ed.D. - Elementary Education (Emphasis in Outdoor Education)

11. Future Developments:

The Department of Elementary Education is involved in two cooperative phases of Outdoor Education program development within the University. These are: (A) The Department meets periodically with members of Liberal Arts Colleges, including members from the various science departments and the Department of Health, Physical Education and Recreation. This interdepartmental Outdoor Education Committee plans and coordinates curricular offerings for undergraduate and programs; (B) The Department will also serve on a committee to plan for the expansion of the Camp Tontozona facility into a larger center for Outdoor and Continuing Education.

12. Describe any field campus or Environmental Education center used in your program(s):

Arizona State University owns Camp Tontozona Outdoor Education Center. The six acre camp is surrounded by many acres of unoccupied U.S. Forest Service land and located 100 miles from the ASU campus. Tall ponderosa pine surround the camp which is at 5200 feet of elevation, just below the Tonto (Mogollon) Rim. Dormitories and cabins can accommodate about 100 students. There is also a large, well-equipped kitchen and dining hall. In addition to these indoor facilities, the camp also provides a recreation field, access to Tonto Creek, and hiking and nature trails in the pine of the Tonto National Forest. The University also operates The Center for Environmental Studies which acts to encourage and coordinate interdisciplinary environment-related activities within the University. The

Laboratory of Climatology and the Lower Colorado River Basin Research

Laboratory operate within the Center's administrative umbrella.

Additional projects involving environmental research, community service, and academic programs are under development at the Center.

The Center has an Advisory Committee with members representing each college or school of the University.

In addition to these facilities, the Department of Elementary Education has an Outdoor and Science Education Workshop-Classroom which is used for instruction and materials display and storage. The facility features a complete file of Outdoor-Environmental Education documents on microfilm and sets of curriculum materials and guides from several outdoor-environmental education programs in the country and Canada.

CALIFORNIA STATE UNIVERSITY

1. Name of Contact Person, Title, Location, Mailing Address, and Phone:

Dr. Esther P. Railton

Professor of Teacher Education and Coordinator of Environmental
Education

California State University, Hayward

Hayward, California 94542

Phone: 415/881-3016 or 881-3027

2. Administrative Location:

School of Education

3. Degree(s) Offered in Outdoor Education:

M.S. - Curriculum (Concentration in Environmental Education)

4. Total Number of Faculty, Full-time and Part-time:

Full-time: 1

Part-time: 11

5. Faculty Status and Education of Outdoor Education Faculty, Full-time
and Part-time:

Full-time:

Railton, Esther P. - Professor of Teacher Education

B.S. - Western Michigan University (Biology, Elementary Teaching
Certificate)

M.S. - University of Michigan (Conservation and Education)

Ed.D. - University of Illinois (Curriculum)

Part-time:

--James, Margaret A. - Associate Professor of Teacher Education

A.B. - Grove City College

M.A. - Michigan State University

Ph.D. - Michigan State University

--Della-Dora, Delmo - Chairman; Professor of Teacher Education

B.S. - University of Michigan

M.Ed. - University of Michigan

Ed.D. - Wayne State University

--Jones, William E. - Professor of Teacher Education

A.B. - University of California, Santa Barbara

M.A. - San Diego State College

Ed.D. - University of California, Berkeley

--Lepore, Albert R. - Professor of Teacher Education

B.A. - San Diego State College

M.A. - Teachers College, Columbia University

Ph.D. - Columbia University

--Spencer, James E. - Professor of Teacher Education

B.A. - Pomona

M.A. - Claremont Graduate School

Ph.D. - University of California, Berkeley

--Peterson, Rita W. - Assistant Professor of Teacher Education

B.S. - California State College, Hayward

M.A. - University of California, Berkeley

Ph.D. - University of California, Berkeley

--Gross, Phyllis - Professor of Biological Science

B.S. - San Jose State College

M.A. - Stanford University

--Smith, Arthur C. - Professor of Biological Science

A.B. - Stanford University

Ph.D. - Cornell University

--Holtgrieve, Donald G. - Assistant Professor of Geography

B.A. - San Diego State College

M.A. - California State College, Los Angeles

Ph.D. - University of Oregon

--Pagenhart, Thomas H. - Associate Professor of Geography

B.A. - San Jose State College

Ph.D. - University of California, Berkeley

--Vann, John H. - Chairman, Department of Geography; Chairman,
Environmental Studies; Professor of Geography

B.A. - Louisiana State University

Ph.D. - University of California, Berkeley

6. Date Department Founded and Date Degree Program(s) Founded in

Outdoor Education:

1959 - Department of Teacher Education

1972 - M.S. - Curriculum (Concentration in Environmental Education)

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

Prerequisite: B.S.

M.S. - Curriculum - 45 quarter hours

Of those, Curriculum core - 17-20 quarter hours

Environmental Education - 15-19 quarter hours

Activities - 9-11 quarter hours

8. Outdoor Education Course Titles and Descriptions:

Curriculum in Environmental Education: Explores use of the environment in school curricula. Includes demonstrations of methods of teaching out-of-doors; individual and group projects. Introduction to outdoor education programs.

Organization of Resident Environmental Education Programs: Problems and solutions for implementation, e.g., site, staff, health, finance, permission; preparation, program, and classroom followup. Overnight field trip (fee about \$10.00).

Environmental Education Using the School Grounds and Community: Use of school sites and resources for instruction. Nature areas, gardens, parks, paved areas, and lawn furnish a laboratory for discovery and inquiry learning.

Development of Environmental Education: History, needs, conceptual framework, trends and types of programs in the United States and the world. Review of literature and dissertations and masters' theses.

Field Study in Environmental Education: Students conduct a resident environmental education program with children in an outdoor center. Participants meet regularly with supervisors to organize and evaluate their experiences in leadership.

9. Total Number of Students Graduated to Date in Outdoor Education Program(s):

22 M.S. - Curriculum (Concentration in Environmental Education)

10. Approximate Number of Total Students in Various Degree Programs and Percentage of Those Students in Outdoor Education Program(s):

609 Department of Teacher Education

80 M.S. - Curriculum (Concentration in Environmental Education)

14% % of student enrollment in Outdoor Education Program(s)

11. Future Developments:

California State University, Hayward, also has a master's program in environmental biology, environmental earth sciences, and environmental geography. There is an undergraduate concentration in environmental studies which may be applied to one of several majors. An interdisciplinary major in environmental studies is under consideration. The School of Education works closely with the county and district offices of education and, following an environmental education fair, is establishing a consortium with community environmental education agencies. An environmental education curriculum center is being set up on campus for faculty, student and community use.

12. Describe any field campus or Environmental Education center used in your program(s):

The Biological Science Department cooperates with an oceanographic institute at Moss Landing and has a 40 acre nature preserve, Garin Ranch, connecting the campus with a 500 acre regional park. Education

students use these and regularly visit the Marine Ecological Research Laboratory, a county department of education site. The campus is surrounded by an unusual variety of coastal and inland ecological zones from sea level to 8000 feet, urban and rural developments, management agencies and conservation groups. These are utilized in the program.

HUMBOLDT STATE UNIVERSITY

1. Name of Contact Person, Title, Location, Mailing Address and Phone:

Dr. John G. Hewston

Department of Natural Resources Planning and Interpretation

School of Natural Resources

Humboldt State University

Arcata, California 95521

Phone: 707/826-4147

2. Administrative Location:

School of Natural Resources

3. Degree(s) Offered in Outdoor Education:

B.S. - Natural Resources (Emphasis in Interpretation)

M.S. - Natural Resources-Interdisciplinary (Emphasis in Interpretation)

4. Total Number of Faculty, Full-time and Part-time:

Full-time: 1,

Part-time: 4

5. Faculty Status and Education of Outdoor Education Faculty:

Full-time and Part-time:

Full-time:

Hewston, John G. - Professor

B.A. - Pacific Lutheran University (Biology)

M.S. - Oregon State University (Wildlife Biology)

Ph.D. - Utah State University (Fisheries-Outdoor Recreation)

6. Date Department Founded and Date Degree Program(s) Founded in Outdoor Education:

B.S. - Natural Resources Planning and Interpretation - 192
quarter hours

General Education - 55 hours

Core in Major - 56-57 hours

Interpretive Emphasis - 56-61 hours

Electives - to equal minimum of 192 units

8. Outdoor Education Course Titles and Descriptions:

Natural Resource Public Relations: Application of public relations concepts to natural resource administration; role of public relations, conservation education and interpretation in state, federal, and private organizations (conservation and outdoor recreation agencies).

Natural Resource Interpretation Methods: Application of basic information and education principles, use of interpretive methods and techniques in programs of natural resource management agencies. Case studies and development of solutions.

Conservation Administration: Historical development of conservation programs, policies and organizations of public conservation agencies, especially at the state and federal levels. Discussions and readings in organization, funding, agency relationships - conflicts, enforcement and public relations programs.

Related course work in Natural Sciences.

9. Total Number of Students Graduated to Date in Outdoor Education

Program(s):

300 B.S. - Natural Resources or Natural Resources Planning and Interpretation
240 B.S. - Natural Resources Planning and Interpretation
0 New Interpretation Emphasis (begins 1977)
0 M.S. - Natural Resources-Interpretation or Natural Resources Planning and Interpretation

10. Approximate Number of Total Students in Various Degree Programs and Percentage of Those Students in Outdoor Education Program(s):

390 B.S. - Natural Resources Planning and Interpretation
273 B.S. - Natural Resources (New Interpretation Emphasis)
12 M.S. - Natural Resources-Interpretation

11. Future Development:

New program offering an emphasis in either planning or interpretation will begin in the fall of 1977. Also, option will be retained for students to design their own programs of emphasis (after taking General Education and Department Core).

12. Describe any field campus or Environmental Education center used in your program(s):

The Humboldt State University maintains a functional fish hatchery and wildlife pens on campus, which are used for study, research and where students lead an average of 3,000 school group tours per year for practice in conservation education. Also, a small museum in

the Wildlife Building, a marine laboratory ten miles north of campus, greenhouses in the forestry complex and school forest eight miles away, plus other University operated field study areas, are maintained.

SAN FRANCISCO STATE UNIVERSITY

1. Name of Contact Person, Title, Location, Mailing Address and Phone:

Dr. William M. Hammerman

Professor of Education and Coordinator, ECO Education Programs

School of Education

San Francisco State University

1600 Holloway Avenue

San Francisco, California 94132

Phone: 415/469-1300

2. Administrative Location:

Interdisciplinary Studies in Education Department

School of Education

3. Degree(s) Offered in Outdoor Education:

M.A. - Education (Concentration in ECO Education = Environmental,
Camping and/or Outdoor Education)*

*SFSU has other M.A. degree options that allow a concentration in
ECO Education; e.g., Secondary Education, Elementary Education,
Recreation. The actual courses are offered through the ISE Department.

4. Total Number of Faculty, Full-time and Part-time:

Full-time: 1

Part-time: 0

5. Faculty Status and Education of Outdoor Education Faculty, Full-time
and Part-time:

Full-time:

Hamnerman, William M., Professor of Education

B.S. - Towson State Teachers College, Maryland (Mathematics, Science, Elementary-Junior High School Education)

M.A. and ED.D. - Institute for Child Study, University of Maryland (Human Growth & Development Education, Sociology, Guidance and Counseling)

6. Date Department Founded and Date Degree Program(s) Founded in Outdoor Education:

1964 - Interdisciplinary Studies in Education

1970 - M.A. - Education (Concentration in ECO Education)

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

M.A. - Education (Concentration in ECO Education) -- 33 semester hours

ISE Core Courses - 9 semester hours

Electives - 9 semester hours

ECO Education - 12 semester hours

Field Study/Thesis - 3 semester hours

8. Outdoor Education Course Titles and Descriptions:

Leadership Development Workshop: ECO Education: Direct experience workshop designed to prepare staff members for their roles in environmental, camping and/or outdoor education programs. Offered only at selected field experience centers.

Environmental, Camping and/or Outdoor Education in the School

Curriculum: ECO education programs in the school curriculum, K-12. Designed for preservice/in-service teachers, recreation leaders, and interpreters. Study of what ECO Education is, how and what to teach, instructional strategies, foundations and historical developments.

Environmental, Camping and/or Outdoor Education Field Course:

Field experience course designed to acquaint preservice/in-service teachers, recreation leaders, and interpreters with various ways in which the out-of-doors can be utilized as a laboratory for learning.

Directed Experiences in Environmental, Camping and/or Outdoor

Education: Guided observation and participation experiences with people in ECO education programs. Offered only at selected field experience centers.

Graduate Level Courses:

Organization and Administration of ECO Education Programs⁶

A seminar devoted to an exploration of all aspects of an administrator's role in connection with ECO education programs. Student develops an organization plan that covers: philosophy, goals and objectives; program activities; leadership development; facilities; budget; evaluation; and legal codes.

Field Work in Environmental, Camping and/or Outdoor Education:

Student spends a minimum of twelve weeks in an ECO education program performing instructional and/or administrative duties.

Internship Seminar in ECO Education: A seminar to provide

an opportunity for continuous evaluation of the field experience.

and to provide problem-solving situations that are derived from realistic settings.

Seminar in Environmental, Camping and/or Outdoor Education:

An intensive study of the philosophical and historical development, international programs, current legislation, standards, research/evaluation studies, and curriculum trends pertaining to ECO education.

9. Total Number of Students Graduated to Date in Outdoor Education

Program(s):

- 5 M.A. - Education (Concentration in ECO Education)
- 2 M.A. - Secondary Education (Concentration in ECO Education)
- 2 M.S. - Recreation (Concentration in ECO Education)

10. Approximate Number of Total Students in Various Degree Programs and

Percentage of Those Students in Outdoor Education Program(s):

- 17 M.S. - Education (Concentration in ECO Education)
- 10% % of Student Enrollment in Outdoor Education Program(s)

11. Future Developments:

The SFSU Division of Continuing Education (Extension & Summer Sessions) has offered credit for various ECO Education courses, seminars, workshops, and field experiences conducted away from the main campus since 1968. Over 100 centers across the nation have been designated as eligible to offer credit for programs under the guidance of an accredited field experience supervisor. Credit option programs are currently being developed with national groups such as the National Park Service and the National Wildlife Federation.

The Coordinator of ECO Education Programs is devoting considerable time toward promoting "cooperating" and "consortium" efforts among the total spectrum of groups interested in developing ECO Education programs: business, industry; government; volunteer; and community based organizations.

12. Describe any field campus or Environmental Education center used in your program(s):

The ECO Education program utilizes nonuniversity related centers, primarily for its various field experience courses and internship program. Three San Francisco Bay Area county programs operate centers within 50 miles of the main campus.

In the past, demonstration summer session programs were conducted at the J. Paul Leonard Outdoor Education Center in the Sierra Nevada. That university related facility is now used only as a science-related field campus for research activities and scientifically oriented field courses.

COLORADO STATE UNIVERSITY

1. Name of Contact Person, Title, Location, Mailing Address and Phone:

Dr. Charles L. Mahoney

Professor of Resource Conservation

College of Forestry and Natural Resources

Colorado State University

Fort Collins, Colorado

Phone: 303/491-6675

2. Administrative Location:

Department of Recreation Resources

3. Degree(s) Offered in Outdoor Education:

B.S. - Recreation (Concentration in Conservation Education)

4. Total Number of Faculty, Full-time and Part-time:

Full-time: 1

5. Faculty Status and Education of Outdoor Education Faculty, Full-time and Part-time:

Full-time:

Mahoney, Charles L., Professor

B.S. - Colorado State University. (Forest Recreation and Wildlife Conservation)

M.S. and Ph.D. - State University of New York (College of Environmental Science and Forestry, Ecology)

6. Date Department Founded and Date Degree Program(s) Founded in Outdoor Education:

1965 - Department of Recreation Resources

1975 - B.S. - Recreation (Concentration in Conservation Education)

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

B.S. - Recreation - 128 credit hours

Concentration in Conservation Education - 23 credit hours plus
8 hours related cognate

Related cognate in Natural Resources - 8 credit hours

8. Outdoor Education Course Titles and Descriptions:

Conservation Education: Study of the historical and philosophical foundations of education. Exploration of the various types of programs -- national and international. Survey of current professional preparation and opportunities, organizations, publications and research.

Environmental Conservation: Overview of natural resources environmental concerns including population, pesticides, energy and pollution. Current status and future outlook for natural resources.

9. Total Number of Students Graduated to Date in Outdoor Education Program(s):

10. B.S. - Recreation (Concentration in Conservation Education)

10. Approximate Number of Total Students in Various Degree Programs and Percentage of Those Students in Outdoor Education Program(s):

300 B.S. - Recreation

50 B.S. - Recreation (Concentration in Conservation Education)

16% % of student enrollment in Outdoor Education Program(S)

11. Future Developments:

Colorado State University is developing an interdisciplinary approach to conservation education through involvement with other university faculty and schools. The Pingree Park Campus serves as a Recreation and Environmental Education Center for students. Field experiences, environmental education programs and an environmental education research center are being developed at the Pingree Park Campus to enhance the concentration in conservation education programs. A graduate program in conservation education and the addition of faculty are envisioned in the near future.

12. Describe any field campus or Environmental Education center used in your program(s):

The university owns the Pingree Park Campus, a recreation and environmental education center located high in the Rocky Mountains approximately 55 miles west of Fort Collins. It is now being developed to encompass the education of students in conservation education and field studies. Environmental education programs and research are centered at this 283 acre facility.

UNIVERSITY OF NORTHERN COLORADO

1. Name of Contact Person, Title, Location, Mailing Address and Phone:

Dr. Vincent A. Cyphers, Professor
Chairperson, Outdoor Education Program
Interdisciplinary Programs
University of Northern Colorado
Greeley, Colorado 80639
Phone: 303/351-2807

2. Administrative Location:

Interdisciplinary Programs

3. Degree(s) Offered in Outdoor Education:

B. A. - Minor in Outdoor Education available to undergraduate students in all academic areas

B. A. - Individualized interdisciplinary degree program in Interdisciplinary Studies may be developed with a concentration in Outdoor Education - Environmental Education

B. S. - Recreation with a minor in Outdoor Education - Environmental Education

B. A. - Minor in Environmental Studies available to undergraduate students in all academic areas

M. A. - Major degree program in any academic area or area of specialization may be complemented by a concentration in Outdoor Education - Environmental Education

*M.A. - School of Educational Change and Development, a unique, innovative, interdisciplinary concept, which allows candidates to design their own programs, permits a concentration in Outdoor Education - Environmental Education

*Ed.D. - same as *M.A. above

Ed.S. - A Specialist in Education Degree in Outdoor Education - Environmental Education

Ed.D. - A supporting area in Outdoor Education - Environmental Education may be taken in conjunction with a major degree in any academic discipline or area of specialization.

4. Total Number of Faculty, Full-time and Part-time:

Full-time: 1 in Outdoor Education. Numerous full-time faculty in a variety of disciplines committed to the concept of Outdoor Education constitute the interdisciplinary instructional team.

Part-time: Graduate assistant(s) teach undergraduate classes in Outdoor Education.

5. Faculty Status and Education of Outdoor Education Faculty,

Full-time and Part-time:

Full-time:

Cyphers, Vincent A., Professor and Chairperson

B.S. - Pacific University (Health and Physical Education)

M.A. - Colorado State College (Health and Physical Education)

Ed. D.-University of Northern Colorado (Secondary Education, Curriculum and Outdoor Education)

-Interdisciplinary Team of Faculty in each of the academic disciplines constitute the other full-time faculty.

6. Date Department Founded and Date Degree Program(s) Founded in Outdoor Education:

1970 - B. S. - Minor in Outdoor Education

1958 - M. A. - Concentration in Outdoor Education - Environmental Education with graduate major in any academic discipline

1960 - Ed. S. - Outdoor Education

1962 - Ed. D. - Supporting Area in Outdoor Education - Environmental Education

*1970 - M. A. and Ed. D. - Concentration in Outdoor Education - Environmental Education, School of Educational Change and Development

1976 - B. A. - Interdisciplinary Studies

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

-B. S. - Minor in Outdoor Education - 27 hours

-B. A. - Interdisciplinary Studies: An individualized program of study with a concentration in Outdoor Education - Environmental Education is available.

-M. A. - In any academic discipline or area of specialization with a concentration in Outdoor Education - 20 hours

-M. A. - School of Educational Change and Development permits an individualized concentration in Outdoor Education - 45 hours

-Ed. S. - Outdoor Education - 45

-Ed. D. - Supporting Area in Outdoor Education - Environmental Education - 24 hours

*-Ed. D. - School of Educational Change and Development permits an individualized concentration in Outdoor Education - Environmental Education

*School of Educational Change and Development -

The School is an approved administrative unit of the university.

The major purpose of the school is to cooperate with and facilitate innovative programs and ideas anywhere within the university.

Students who wish to pursue innovative programs leading to a degree may submit a proposal to the school. The school does not duplicate any academic program of the university, but exists as an option for those students who wish to pursue programs that require the use of the total resources of the University.

Admission will be by invitation and based on the program the student submits that has been approved by the Advisory Board and the Resource Board. In general, the program will be of an interdisciplinary nature and will use the total resources of the university, and may use the resources of the community, state and nation.

8. Outdoor Education Course Titles and Descriptions:

Outdoor Education and Environmental Awareness: A course

designed to develop appreciation and awareness for the natural environment through direct experience participation in many environmental settings. Cognitive learnings will be taught followed by definite concentration on affective and psychomotor learnings. The interdisciplinary approach, involving faculty from other disciplines and resource persons with special expertise, will be utilized.

Education for Leisure Through Outdoor Education: Emphasis will be placed on the unique contribution Outdoor Education can make toward educating people for their leisure. An analysis will be made of selected educational programs with specific leisure education programs. Contributions made by local, state, national, and private agencies will be emphasized.

Practicum in Outdoor Education: Open only by invitation to undergraduate students. Supervised professional activity in the student's major field with a minimum equivalent of two hours per day during a ten week quarter. One copy of a well-written paper must be filed with the instructor before credit is given.

Programs in Outdoor Education: A course designed to acquaint the student with the varied programs in Outdoor Education in the state and nation. Traditional and innovative programs will be explored and analyzed to determine the feasibility and effectiveness of these programs in meeting educational and societal needs.

Internship in Outdoor Education: This course is designed to provide direct first-hand experience in Outdoor Education in one or more programs available in public school settings and educationally related agencies. Opportunities will be provided for instruction, supervision and leadership responsibilities in selected education programs where the interdisciplinary or multidisciplinary approach is followed.

Practicum: Open only by invitation to graduate students. Supervised professional activity in the student's major field with a minimum equivalent of two hours per day during a ten week quarter. One copy of a well-written paper must be filed with the instructor before credit is given.

Philosophy and Principles of Outdoor Education: Designed to acquaint teachers and administrators with the breadth, depth, and scope of outdoor education. The interdisciplinary approach involving instructors from the Laboratory School and academic areas of the college will be followed. Direct experiences are provided through observation and participation in day-long and week-long outdoor school programs.

Organization and Administration of Outdoor Education Programs: A course designed to acquaint students, teachers, supervisors, curriculum directors, administrators and university faculty with the procedures and problems encountered in the initiation and administration of Outdoor Education programs. Varied programs will be considered in terms of organization, conducting and evaluation. Acquisition, financing, development

and maintenance will be emphasized.

Research Seminar in Outdoor Education: A course designed to develop the students' appreciation, understanding and competency in the field of research. An analysis and interpretation will be made of selected research in Outdoor Education and the related fields of Environmental Education, Conservation Education and Camping.

9. Total Number of Students Graduated to Date in Outdoor Education Program(s):

-- B. A. - Minor in Outdoor Education - unknown

-- M. A. - Concentration in Outdoor Education - Environmental Education - unknown

6 Ed. S. - Outdoor Education

12 est. Ed. D. - Supporting area in Outdoor Education - Environmental Education

6 *M. A. and Ed. D. - School of Educational Change and Development

10. Approximate Number of Total Students in Various Degree Programs and Percentage of Those Students in Outdoor Education Program(s):

50 B. A. - Minor in Outdoor Education - approximate

5 B. A. - Interdisciplinary Programs: Outdoor Education - Environmental Education

49 M. A. - Concentration in Outdoor Education - Environmental Education

25 Ed. S. - Specialist Degree in Outdoor Education -
Environmental Education

6 Ed. D. - Supporting area in Outdoor Education

3 M. A. - School of Educational Change and Development
(Concentration in Outdoor Education)

6 Ed. D. - School of Educational Change and Development
(Concentration in Outdoor Education)

11. Future Developments:

The Outdoor Education - Environmental Education Program located in Interdisciplinary Studies at the University of Northern Colorado, Greeley, Colorado, is developing further dimensions to the broad interdisciplinary concept in the form of an Outdoor Experiential Education Program focusing on Outdoor Adventure experiences.

Field experiences in outdoor education - environmental education centers with the UNC Laboratory Outdoor Education Programs and Public School Outdoor Education Programs are available through student teaching experiences, internships, practicums and independent studies. Enrichment of undergraduate and graduate programs in Outdoor Education - Environmental Education through building and improving relationships is available in all academic disciplines. In-service educational offerings will be expanded to meet the interests and needs of professionals desirous of improving their knowledge and skills. A full-quarter

outdoor experiential program is being formulated to meet the needs of professionals interested in Outdoor Adventure Education.

12. Describe any field campus or Environmental Education center used in your program(s):

The University owns "Old Man Mountain" Field Campus, a recreation and outdoor Adventure Education, in the Estes Park Area.

Cheley Colorado Camp in the Estes Park area is being used for residential programs. These facilities serve university resident programs and public school resident programs.

THE UNIVERSITY OF WEST FLORIDA

1. Name of Contact Person, Title, Location, Mailing Address and

Phone:

Dr. James Pheane Ross

Associate Professor

Department of Health, Leisure & Sports

The University of West Florida

Pensacola, Florida 32504

Phone: 904/476-9500, Ext. 281

2. Administrative Location:

Omega College

3. Degree(s) Offered in Outdoor Education:

B. S. - Health, Leisure and Sports (Concentration in Environmental Education)

4. Total Number of Faculty, Full-time and Part-time:

Full-time: 7

Part-time: 0

5. Faculty Status and Education of Outdoor Education Faculty,

Full-time and Part-time:

Full-time:

Ross, James Pheane

B. S.-Mississippi State University (Education)

M. S.-University of Kentucky (Sociology and Recreation)

Ph.D. - University of Kentucky (Recreation)

6. Date Department Founded and Date Degree Program(s) Founded in

Outdoor Education:

1970 - Health, Leisure & Sports

1971 - B.S. - Recreation (Concentration in Environmental Education)

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

B.S. in Leisure - 180 quarter hours

Courses in Leisure - 45 quarter hours

Courses in related fields - 45 quarter hours

8. Outdoor Education Course Titles and Descriptions:

Man in Nature: Problems that man faces as he attempts to cope with and understand his environment, himself and his position in nature.

Biology of Flowering Plants: Modern biology of angiosperms emphasizing basic concepts in plant morphology and anatomy, and evolutionary and experimental basis of plant taxonomy. Laboratory work includes slide preparation, herbarium technique and field project.

Environmental Biology: Selected ecosystems used to study structure and function of biological communities and to investigate direct responses of living systems to their environment. Interrelationships such as limiting factors behavior, physiological adaptation and rhythms studied at individual population and community levels.

Field and Habitat Ecology: Field course stressing composition, distribution and dynamics of different plant and animal communities. Collection and identification of organisms from their natural habitats; effects of man's interference on structure and stability of natural biological communities.

Outdoor Leisure: Use and enjoyment of out-of-doors; acquiring of camper's skills and interpretation of environment of a given area. Field trips offered minimum of three hours per week.

9. Total Number of Students Graduated to Date in Outdoor Education

Program(s):

2 B.S. - Recreation (Concentration in Environmental Education)

10. Approximate Number of Total Students in Various Degree Programs and

Percentage of Those Students in Outdoor Education Program(s):

27 B.S. - Leisure

2 B.S. - Leisure (Concentration in Environmental Education)

13% % of student enrollment in Outdoor Education Program(s)

11. Future Developments:

The University of West Florida has an interdisciplinary approach to outdoor and environmental education through close cooperation of faculties from other disciplines such as Biology, Geology, History and Sociology-Anthropology. The University has a 1,000 acre campus of which over 90% is "natural or in the wild." The University also has acreage on an island in the bay outside Pensacola that is also used as a study area. Field Experience and a 3 months practicum is going through the mill now to begin in the fall of 1977.

12. Describe any field campus or Environmental Education Center used in your program(s):

The University of West Florida's 1,000 acre campus is used for educational purposes such as hikes, trails, camping and research.

UNIVERSITY OF IDAHO

1. Name of Contact Person, Title, Location, Mailing Address and Phone:

Dr. James R. Fazio

Associate Professor (Environmental Interpretation) and Academic
Chairman

Wildland Recreation Management Program

College of Forestry, Wildlife and Range Sciences

University of Idaho

Moscow, Idaho 83843

Phone: 208/885-7911

2. Administrative Location:

College of Forestry, Wildlife and Range Sciences

3. Degree(s) Offered in Outdoor Education:

B.S. - Wildland Recreation Management (Concentration in Environ-
mental Interpretation)

M.S. - Wildland Recreation Management (Concentration in Environ-
mental Interpretation)

Ph.D., one degree program for entire College (Concentration in
Environmental Interpretation)

4. Total Number of Faculty, Full-time and Part-time:

Full-time: 4

Part-time: 1

50

38

5. Faculty Status and Education of Outdoor Education Faculty, Full-time and Part-time:

Full-time:

Fazio, James R., Associate Professor & Academic Chairman

B.S. - West Virginia University (Forestry)

M.P.S. - Cornell University (Conservation; minor in Environmental Education)

Ph.D. - Colorado State University (Recreation Resources; minor in Education)

Part-time:

Spott, Diane, Instructional Assistant

B.S. - University of Wisconsin at Stevens Point (Resource Management and Nature Interpretation)

M.S. - University of Idaho (in progress; Environmental Interpretation)

6. Date Department Founded and Date Degree Program(s) Founded in Outdoor Education:

1974 - Wildland Recreation Management Program

1974 - Wildland Recreation Management Program (Concentration in Environmental Interpretation)

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

B.S. - Wildland Recreation Management - 136 semester hours

(includes 12 semester hours selected from Interpretation - related electives both inside and outside college)

8. Outdoor Education Course Titles and Descriptions:

Principles of Wildland Recreation Management: Fall and Spring. Overview of the role of wildland recreation resources in contemporary society; integrates several areas of wildland recreation management including political economy, behavior and leisure, interpretive analysis, and planning into an overall multiple-use wildland management framework.

Environmental Interpretive Methods: Fall only. Theory and application of communicating natural resource messages by interpretive naturalists and other wildland managers to user publics through various sensory channels.

Interpretive Methods Lab: Spring only. Practical experience in the development and application of interpretive materials and techniques, concentration is on equipment and those methods commonly employed by natural resource agencies for communicating management programs and interpreting the natural environment to visitors. One overnight field trip.

Personalities & Philosophies in Conservation: Spring only. An examination of the lives and thinking of individuals who have significantly influenced current conservation practices or issues surrounding them.

Recreation Operations & Facilities Management: Spring only. Several important parts of recreation resource management are to provide facilities for visitor use and enjoyment, to protect visitors from harm, and to protect resources from visitor damage. The objective is to provide visitors with enjoyable park experiences.

The purpose of this course is to develop in students an understanding of facilities management so as to provide enjoyable park experiences for visitors at efficient cost levels.

Recreation Field Studies: Summer only. Includes application of techniques involved in wildland recreation measurements; field trips; case studies; and site evaluation. Three weeks of all-day summer classes and an extended field trip.

Renewable Natural Resources Internship: Wildland Recreation: Fall, Spring, Summer. Available all semesters, but particularly appropriate summers. Supervised field experience with an appropriate public or private agency. Contingent on availability of openings and approval of instructor.

Seminar: Wildland Recreation: Fall only. Major philosophical, management, and research problems of wildlands; presentation of individual studies on assigned topics.

9. Total Number of Students Graduated to Date in Outdoor Education

Program(s):

3 B.S. - Wildland Recreation (Environmental Interpretation Concentration)

1 M.S. - Wildland Recreation (Environmental Interpretation Concentration)

5 B.S. - Wildland Recreation (others)

4 M.S. - Wildland Recreation (others)

10. Approximate Number of Total Students in Various Degree Programs and Percentage of Those Students in Outdoor Education Program(s):

99 Wildland Recreation Management Programs

20 Wildland Recreation Management (Concentration in Environmental Interpretation)

20% % of student enrollment in Outdoor Education Program(s)

11. Future Developments:

Our immediate objectives are: 1) to continue strengthening the undergraduate program through individualized and innovative approaches to teaching; 2) to expand the graduate program through increased research opportunities; and 3) to continue to expand our public service function through more workshops, conferences and publications. Also in priority are improving contacts for employment and increasing field experience.

12. Describe any field campus or Environmental Education center used in your program(s):

Big Meadow Creek Recreation Area is a 200-acre unit of the university forest near Troy, Idaho. It features space for active recreation such as picnicking and ball playing, as well as ponds, streams and a nature trail for interpretive activities. A student is selected each semester to assist at the area on a directed studies or work-study basis, and the interpretive trail is developed and maintained by students. Idler's Rest Nature Preserve is a 36-acre tract of land approximately six miles northeast of Moscow. It is owned by The Nature Conservancy and managed by program faculty for educational and research purposes. The area contains a diversity of habitat types, including an old cedar stand. Interpretive trails and other

facilities are developed and maintained as student projects. Students also lead interpretive walks on the area and conduct research.

Taylor Ranch is a field station administered by the College for the UI Wilderness Research Center. Located in the heart of the Idaho Primitive Area, the 60-acre tract is used for graduate and independent research, including wilderness and historical interpretation.

The University also owns approximately 7,000 acres of forested land on Moscow Mountain, within an hour drive of campus. This, too, is available for research and study projects. It is also open for public recreation such as hunting, nature study, hiking and sight-seeing.

GEORGE WILLIAMS COLLEGE

1. Name of Contact Person, Title, Location, Mailing Address and Phone:

Mr. Nelson E. Wieters

Chairman, Department of Leisure and Environmental Resources
Administration

George Williams College

555 Thirty-first Street

Downers Grove, Illinois 60515

Phone: 312/964-3100

2. Administrative Location:

Department of Leisure and Environmental Resources Administration

3. Degree(s) Offered in Outdoor Education:

B.S. - Recreation Services (Concentrations in Outdoor Education/
Recreation; Recreation Resource Planning)

M.S. - Leisure and Environmental Resources Administration (Concen-
trations in Administration of Organized Camping; Environmental Edu-
cation Administration; Interpretive Services Administration; Outdoor
Recreation Resources Administration; Urban Park and Recreation
Administration)

CAPS (Certificate of Advanced Professional Study) - This program is
specifically designed for those who wish to continue their education
beyond the Master's degree, but in a highly specialized professional
area rather than through the pursuit of a second Master's degree.

The program is available only to those who hold a Master's degree

from an accredited institution. It involves 34 quarter hours of course work, plus an internship and research project.

4. Total Number of Faculty, Full-time and Part-time:

Full-time: 10

Part-time: 6

5. Faculty Status and Education of Outdoor Education Faculty,

Full-time and Part-time:

Full-time:

--Wieters, Nelson E., Chairman and Associate Professor

A.B. - William Jewell College (Psychology)

M.S. - George Williams College (Community Recreation)

--Born, Ted J., Associate Professor of Resource Management & Research

B.S. - Northwestern University (History)

M.A. - Northwestern University (Education)

M.S. and Ph.D. - University of Arizona (Watershed Management and Sociology)

--Clark, Jr., Edward T., Professor of Environmental Education

B.A. - University of Richmond (English)

B.D. - Andover Newton Theological School (New Testament and Psychology)

S.T.M. - Eden Theological Seminary (Counseling Psychology)

Ph.D. - St. Louis University (Higher Education)

--Clayton, Donald W., Associate Professor of Recreation

B.D. - McCormick Seminary (Religious Education)

M.S. - Colorado State University (Sociology and Anthropology)

Ph.D. - Carroll College (Biology and Education)

--Duncan, William B., Assistant Professor of Outdoor Education

B.A. - University of California at Davis (History)

M.S. - George Williams College (Camping and Outdoor Education)

--Pine, Ronald H., Associate Professor Ecology & Environmental Studies

B.A. - University of Kansas (Zoology)

M.S. - University of Michigan (Zoology)

Ph.D. - Texas A&M University (Wildlife Science)

--Rousch, John, Instructor, Recreation and Outdoor Education

B.S. - Trent State College (Industrial Education and Technology)

M.S. - Indiana University (Recreation)

--Van Matre, Steve, Assistant Professor of Environmental Studies

B.A. and M.A. - Purdue University (American Government and History)

--Young, Jay D., Assistant Professor of Park & Recreation Management

B.S. and M.S. - University of Oregon (Recreation and Park Management)

--Backiel, Marcia, Instructor, Outdoor Education

B.A. - Ursuline College (Biology)

M.S. and C.A.P.S. - George Williams College (Camping and Environmental Education Administration)

Part-time:

Kaplan, Gordon (Camping and Outdoor Education)

--Birley, Varn (Food Service Management)

--Schrage, Dr. Harold (Therapeutic Recreation)

--Schultz, Joseph (Parks and Recreation Administration)

--Smith, Roger (Organizational Business Management)

--Young, Richard (Technology and Environmental Controls)

6. Date Department Founded and Date Degree Program(s) Founded in

Outdoor Education:

1943 - Group Work and Camping

1972 - Name changed to Department of Leisure and Environmental Resources Administration

1974 - B.S. - Recreation Services

1972 - M.S. - Department of Leisure and Environmental Resources Administration

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

B.S. - Recreation Services - 192 quarter hours

M.S. - Leisure and Environmental Resources - 57-63 quarter hours, field work, research project

C.A.P.S. - M.S. degree plus 34 additional quarter hours, internship and research project

8. Outdoor Education Course Titles and Descriptions:

Practicum in Outdoor Leisure and Environmental Activities

Leadership: Two-week resident course each September at the Lake Geneva Campus. Preparation for leadership and participation in outdoor recreation skills. Potential certification in camp counseling, campcraft, sailing, boating, canoeing, powercraft, and environmental activities. Waterskiing, hiking and mountain climbing, and bait and fly casting.

Introduction to the Environment: Environmental concepts, philosophy, and methodology. Strong experiential component. Development of skills for introducing others to the environment.

Practicum in Environmental Education Teaching: Philosophies, objectives, and teaching techniques in environmental/outdoor education. Three-day training session at the Lake Geneva Campus followed by 3-5 day resident leadership practicum involving elementary/junior high pupils.

Ecosystems: Principles of ecology; cyclic phenomena and energy flow in natural communities.

Values and the Environment: Personal and societal values which have led to the current environmental problems. Clarification of student's environmental values.

Organization and Administration of Camping: Growth and significance of the camping movement; objectives, organization, program, philosophy, and methods; leadership selection, training and supervision, health, safety and sanitation, business management, promotion and recruiting, food service, site selection and development.

Audio-Visual Techniques: The design and development of interpretive aids. Includes an exploration of the uses for the latest audio-visual ideas as well as the creation of simple tools with a minimum of material and money.

Communications Skills: Emphasizing the fundamentals of interpretive writing and speaking. Practical work with the understandings and skills necessary for good speakers and adequate writers.

Natural History: A field course in understanding the natural world. Involves exploration of the out-of-doors in order to answer questions such as "What is it?", "What does it do?", "What is done to it?" and "So what?".

Environmental Education Administration Internship: At the Lake Geneva Campus. Teaching, supervision, curriculum design, program development, recruitment and orientation, and evaluation as a member of the Outdoor Education Program staff.

Interpretive Services Field Work: Involvement in two or three field placements representing natural and historical interpretation, and community education. One of these must be a "solo" experience with either new or initial programming responsibilities. All placements will emphasize the actual implementation of quality activities and programs.

Management of Natural Resources: Ecology, conservation and the relation of man to his natural environment. Natural resources, water, wildlife, forestry, and range. Man-made elements of the landscapes in keeping with the natural setting. Building and maintaining a framework of the entire scope of the landscape.

Sponsorship and Management of Outdoor Recreation Services: Administrative structure and programs of public and private agencies and organizations in outdoor recreation.

Interpretation and the Learning Environment: An analysis of the foundations of interpretation and a review of the principles of learning, followed by applications of our understandings to historical sites and situations.

Understanding the Urban Environment: Urban characteristics, emphasizing the Chicago metropolitan area; geographical, ecological and sociological processes that affect patterns of city structure and function; current urban issues, such as housing, social services,

air and water pollution, transportation, impact on affecting the basic "life chances" and destiny of minority people.

Technology and Environmental Controls: Environmental implications of technological developments with a survey of specific environmental impacts. Use of technology in reaching desirable environmental goals and in monitoring impact.

Organization and Administration of Environmental Education Programs: Objectives, administrative implications, different styles of programming, systems development of activities, and administrative support systems.

Management of Resident Environmental Education Laboratories: Administrative support systems, health services, food services, budgeting, recruitment, maintenance, facility development, equipment acquisition and care, administrative procedures, and legal aspects.

Organization of the Camp Philosophy: Growth, significance, and current status of the camp. Developing an operating philosophy and an organizational system. Application to camper and staff organization, program supervisory processes and administrative structure.

Camp Management: Site selection and development, facilities and equipment, maintenance, health and safety, public relations, food service, finance, business procedure, legislation and legal aspects, insurance and research and appraisal.

Specialized Camp Programs and Populations: Organization and administration of day camping, camping for the handicapped, travel camping, tripping, senior citizen camping, and outdoor recreation programs.

Practicum in Outdoor Leisure and Environmental Programming:

Undergraduate outdoor recreation skills program utilized for graduate student development of supervisory criteria and updating program knowledge. Two-week practicum in-residence program in September. Sessions on implication, implementation, administration, and special application to each graduate concentration.

Winter Recreation Practicum: Personal and leadership skills.

Assessment and development of personal attitudes and competencies in programmed challenging activities.

Environmental History: An examination of past and present

American attitudes towards our land and its life. The course traces the changes in our patterns of thinking and the influence which those changes have had upon our formal and informal environmental decision-making.

Designing Interpretive Programs: An opportunity for inter-

preters to explore new ideas. Preparation for (and practice in) creating tools and techniques, and planning comprehensive interpretive programs, with a special focus on the mechanics of innovation.

Reading the Landscape: Reconstructing our natural and historical

heritage from the visual clues of the present. Developing skills for preparing and telling the story of our land and its people, with an emphasis upon direct experience.

9. Total Number of Students Graduated to Date in Outdoor Education

Program(s):

5 B.S. - Recreation Services - Outdoor Education, new program

Recreation Resource Planning

50 M.S. - Leisure and Environmental Resources - over the past four years

10. Approximate Number of Total Students in Various Degree Programs and Percentage of Those Students in Outdoor Education Program(s):

125 B.S. - Recreation

95 M.S.* - Leisure and Environmental Resources

*M.S. - 80 students and C.A.P.S. program - 15 students. These

figures are approximately evenly divided between the concentrations

in: Administration of Organized Camping, Environmental Education

Administration, Interpretive Services Administration, Outdoor Recreation Resources Management, and Urban Parks and Recreation Administration.

11. Future Developments: George Williams College has just completed a major three-year expansion. The undergraduate program, nonexistent three years ago, now has an enrollment of 125. The College does not plan on unlimited growth at this level. The graduate program has increased 268% over the past three years and the faculty 80%. Future expansion will be primarily in the area of extension education through the Department of Leisure and Environmental Resources Administration and the Institute for Environmental Awareness.

12. Describe any field campus of Environmental Education center used in your program(s):

The College also has a campus at Lake Geneva, Wisconsin. This

200-acre outdoor recreation training facility includes over a quarter mile waterfront and smallcraft training facility, 18-hole golf course, living history farm, tennis courts, winter recreation facilities, theatre, etc. Also located here is the Department's Center for Outdoor Education with three full-time faculty and 12 in-resident interns. The program now serves 26 school districts and 7,000 elementary school students annually.

NORTHERN ILLINOIS UNIVERSITY

1. Name of Contact Person, Title, Location, Maining Address and Phone:

Chairperson, Department of Outdoor Teacher Education

Lorado Taft Field Campus

Box 299

Oregon, Illinois 61061

Phone: 815/732-2111 or 732/2112

2. Administrative Location:

Department of Outdoor Teacher Education

College of Education

3. Degree(s) Offered in Outdoor Education:

B.S. - Elementary Education (Area Concentration in Outdoor Teacher Education)

B.S. - Physical Education (Area Concentration in Outdoor Teacher Education)

M.S. - Education (Major in Outdoor Teacher Education)

4. Total Number of Faculty, Full-time and Part-time:

Full-time: 9

Part-time: 0

5. Faculty Status and Education of Outdoor Education Faculty, Full-time and Part-time:

Donaldson, George W., Professor

B.S.E. - Georgia Southern College

M.A. - Teachers College, Columbia University

Ed.D. - Teachers College, Columbia University

--Goering, Oswald H., Professor

A.B. - Bethel College

M.S. - Indiana University

R.Ed. - Indiana University

--Hammerman, Donald R., Professor

Chairman of the Department of Outdoor Teacher Education

Director, Lorado Taft Field Campus

B.S. - Maryland State College

M.S. - University of Maryland

Ed.D. - The Pennsylvania State University

--Janke, Vernon C., Assistant Professor

B.S. - University of Wisconsin (Secondary Education)

M.S. - Indiana State University

--Stark, William D., Associate Professor

B.S. - North Dakota State University

M.S. - Pennsylvania State University

Ed.D. - University of Wyoming

--Swan, Malcolm D., Professor

B.S. - Montana State College

M.S. - Montana State College

M.S.T. - Montana State College

Ed.D. - University of Montana

--Vogl, Robert L., Assistant Professor

B.S. - University of Wisconsin

M.E. - Wisconsin State University

Ph.D. - The University of Michigan

--Wade, Douglas E., Assistant Professor

B.A. - The Beloit College

M.S. - The University of Wisconsin

--Wiener, Morris, Professor

B.S. - George Peabody College for Teachers

M.S. - University of Illinois

Ed.D. - Michigan State University

6. Date Department Founded and Date Degree Program(s) Founded in
Outdoor Education:

1961 - Department of Outdoor Teacher Education

1971 - B.S. - Elementary Education (Area Concentration in Outdoor
Teacher Education)

1971 - B.S. - Physical Education (Area Concentration in Outdoor
Teacher Education)

1962 - M.S. - Education (Major in Outdoor Teacher Education)

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

B.S. - Elementary Education (Area Concentration in Outdoor Teacher
Education) - 15 semester hours

B.S. - Physical Education (Area Concentration in Outdoor Teacher
Education) - 15 semester hours

M.S. - Education (Major in Outdoor Teacher Education)

21 semester hours in the major area

9 semester hours outside the major area

8. Outdoor Education Course Titles and Descriptions:

The Community: An Educational Resource: Study of natural and man-made resources available for educational purposes. Numerous field trips.

Teaching Toward Environmental Quality: Study of the ecological factors affecting the environment with emphasis on the role and responsibility of the school in improving the quality of the environment.

Survey of the Principles in Natural and Physical Sciences: Elements of science necessary for understanding the processes involved in various aspects of natural and physical science. Plants, animals, soil, weather, insects, rocks and minerals. Numerous outdoor experiences will be provided to enrich learning in these areas.

Workshop in Outdoor Education: The investigation and application of outdoor education principles to the particular needs and interests of the workshop participant.

Foundations of Outdoor Education: To acquaint teachers with the basic concepts of outdoor education. The meaning, scope, and value of outdoor education. Emphasis upon procedures and instructional materials especially suited for teaching outdoors.

Arts & Crafts in Outdoor Education: Participation in a program of arts and crafts activities utilizing natural materials.

Clinical Experiences in Outdoor Teacher Education: Clinical experience in use of natural and man-made environments. May not be taken in lieu of or for student-teaching credit.

Historical & Philosophical Development of Outdoor Education:

Detailed examination of the meaning and scope of outdoor education. The historical and philosophical foundations of outdoor education. Evolvement of this movement in American public education is traced and recent significant trends and existing outdoor education programs are examined.

Environmental Quality Education: Cultural, ecological, and educational implications of the environmental movement. Emphasis on factors and influences leading to environmental quality literacy.

Teaching Physical Science in the Outdoors: Study of selected aspects of the physical sciences as related to the outdoor environment. Emphasis on teaching and use of research techniques of scientific investigation.

Advanced Field Experiences in Outdoor Teacher Education: For experienced teachers who wish to supplement and enrich their classroom teaching by including outdoor learning experiences. Ways and means of relating various outdoor learning activities to the various subject matter areas of the school curriculum.

Organization and Administration of Outdoor Education Programs: The initiation and administration of outdoor education experiences of varying lengths and the acquisition, development and maintenance of outdoor education facilities.

Field Science: Provides a basic fund of scientific knowledge which can be studied in the natural environment. Special attention devoted to field research techniques and scientific investigation.

Leisure and the Outdoors: Man and leisure in a changing society and their impact on the natural environment. Emphasis on developing outdoor recreation skills and leadership techniques.

Analysis and Development of Curriculum Materials in Outdoor Education: The selection, production and utilization of audio-visual materials related to outdoor education. The student will learn how to operate and care for scientific and audiovisual equipment and materials. Techniques of producing and constructing teaching aids will be demonstrated. The educational materials available from educational and commercial sources will be surveyed.

Independent Study in Outdoor Education: Individual investigation in outdoor education under the supervision of graduate faculty members. May be repeated to a maximum of three semester hours of credit.

Internship in Outdoor Education: An internship designed to provide supervised experiences in program planning and organization, outdoor instruction, supervision and administration. May be repeated to a maximum of six semester hours of credit.

Introduction to Educational Research in Outdoor Education: Basic course in educational research with emphasis on outdoor education.

Seminar in Outdoor Education: Identification and analysis of current problems, issues and practices in outdoor education.

Master's Thesis: Open only to the student writing a master's thesis under the Master of Science in Education program. The student enrolls with the faculty member directing the thesis.

9. Total Number of Students Graduated to Date in Outdoor Education Program(s):

307 M.S. - Education (Major in Outdoor Teacher Education)

10. Approximate Number of Total Students in Various Degree Programs and Percentage of Those Students in Outdoor Education Program(s):

159 M.S. - Education (Major in Outdoor Teacher Education)

11. Future Developments:

The Department of Outdoor Teacher Education, Northern Illinois University, is continuing to expand overseas offerings. It is possible to undertake internships in Outdoor Education in Canada and England and Adventure/Environmental/Outdoor Education courses offered in England. During the summer, foreign student tours to examine programs in outdoor education in Germany, Austria and Switzerland will continue to be offered periodically.

12. Describe any field campus or Environmental Education center used in your program(s):

The University owns the Lorado Taft Field Campus, a year round outdoor education/environmental education center. The Field Campus has been in continuous operation since 1954. Undergraduates majoring in Elementary Education, Physical Education, Industry and Technology, and Secondary Professional Education participate in a variety of clinical experiences at the Field Campus in connection with teacher preparation at Northern.

An Instructional Materials Center with an extensive collection of Outdoor Education references, resources, and curriculum materials is located at the Taft Campus. Housed in the IHC is a complete collection of all doctoral studies completed in outdoor education. This collection now numbers some 300 doctoral dissertations, covering a period of forty years of research in outdoor education.

SOUTHERN ILLINOIS UNIVERSITY

1. Name of Contact Person, Title, Location, Mailing Address, and

Phone:

Dr. Owen R. Smith

Assistant Professor in Recreation

Department of Recreation

Southern Illinois University

Carbondale, Illinois 62901

2. Administrative Location:

Department of Recreation, College of Education

3. Degree(s) Offered in Outdoor Education:

B. S. - Recreation (Concentration in Outdoor Recreation/
Education)

M. S. - Education (Concentration in Outdoor Recreation/
Education)

Ph. D. - Approved department with Concentration in Outdoor
Education

4. Total Number of Faculty, Full-time and Part-time:

Full-time: 9

Part-time: 1

5. Faculty Status and Education of Outdoor Education Faculty, Full-
Time and Part-time:

Full-time:

71

-Abernathy, William, Assistant Professor

B. S.-Southeast Missouri State College (Physical Education,
Industrial Education)

M. S.-Southern Illinois University (Recreation)

-Freeberg, William, Professor

B. S.-Southern Illinois University (Economics)

M. S.-University of Illinois (Education)

R. Ed.-Indiana University (Recreation)

-McEwen, Douglas, Assistant Professor

B. S.-Michigan State University (Forestry)

M. S.-Michigan State University (Resource Economics)

Ph. D.-Michigan State University (Forest Ecology)

-Smith, Owen R., Assistant Professor

B. S.-Indiana State University (Physical Education)

M. S.-Indiana State University (Recreation)

Ph. D.-University of Utah (Leisure Studies)

Part-time:

Yambert, Paul, Professor

B. S.-University of Michigan

M. S.-University of Michigan

Ph. D.-University of Michigan (Forestry)

6. Date Department Founded and Date Degree Program(s) Founded in

Outdoor Education:

1953 - Department of Recreation

1953 - B. S. - Recreation

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

- B. S. - Recreation - 120 semester hours
- M. S. - Education - 30 semester hours
- Ph. D. - 60 hours beyond Master's degree

8. Outdoor Education Course Titles and Descriptions:

Outdoor Education: Acquaints students with the philosophy and techniques of teaching in the out-of-doors. Ways and means of various outdoor learning experiences.

Recreation Skills: Campcrafts, Camp Counseling, Nature Interpretation.

Nature Interpretation: Acquaints the student with opportunities for the interpretation of natural phenomenon. Avocational as well as vocational aspects of natural resources.

Recreation Workshops: Current innovations and critical evaluation of methods, materials, and supervision of programs in one of the following areas: Day Camps, Puppetry, Storytelling, Leisurecrafts.

Camp Management: Principles and procedures of selection and supervision of personnel, program planning, food preparation, health and safety, camp maintenance, evaluation, and other responsibilities of camp administration.

Outdoor Recreation Management: Philosophy and principles underlying the growth and development of modern outdoor recreation programs. Outdoor recreation is examined in terms of supply

and need, economic aspects, environmental problems and future developments.

Fundamentals of Environmental Education: A survey course designed to help education majors develop an understanding of environmental problems and an awareness of how these types of problems can be handled both inside and outside the classroom.

Environmental Interpretation: Principles and techniques of natural and cultural interpretation. Two hours lecture, three hours laboratory.

Practicum in Outdoor Education: A supervised experience in a professional setting. Emphasis on administrative, supervisory, teaching, and program leadership in outdoor, conservation, or environmental education setting.

Planning Outdoor Areas for Education and Recreation: An examination of master plans for outdoor areas in school and recreation programs. Principles of master-planning and practical experience with the master plan be correlated.

Seminar in Environmental and Outdoor Education: Discussion of individual projects, presentation of research problems and dissertation topics.

Individual Research: Selecting, investigating, and writing of a research topic under the personal supervision of a member of the department. Designed to help the student to develop ability to design, conduct, analyze, and interpret research related to the problem of leisure.

Readings in Leisure and Recreation: Readings in selected topics in leisure and recreation under staff supervision.

Field Work in Recreation: Field work in an approved recreation department. Field work is in the student's field of interest. Supervision under approved agency officer in charge and a member of the department.

Thesis: Done with consent of the department.

9. Total Number of Students Graduated to Date in Outdoor Education

Program(s):

55 B. S. - Recreation (Concentration in Outdoor Recreation/
Education)

10. Approximate Number of Total Students in Various Degree Programs
and Percentage of Those Students in Outdoor Education Program(s):

350 B. S. - Recreation

55 B. S. - Recreation (Concentration in Outdoor Recreation/
Education)

20% % of Student Enrollment in Outdoor Education Program(s)

11. Future Developments:

Southern Illinois University - Carbondale is in the process of evaluating and expanding the course opportunities and study areas in outdoor education/environmental education. Future plans include the development of an inter-disciplinary Ph. D. program in education with a concentration in outdoor/environmental education.

12. Describe any field campus or Environmental Education center used in your program(s):

The Touch of Nature environmental education center consists of over 7,000 acres of hardwood forests adjoined by over 10,000 acres of U. S. Forest Service and Fish and Wildlife property. Touch of Nature serves as an unsurpassed outdoor learning lab. The Touch of Nature facility also has two established resident camps and an Outward Bound type program known as Underway. This program provides many opportunities for experiential type learning. The facility is located approximately 20 minutes away from the main campus.

WESTERN ILLINOIS UNIVERSITY

1. Name of Contact Person, Title, Location, Mailing Address and

Phone:

Dr. Frank D. Lupton, Jr.

Professor

Department of Recreation and Park Administration

Western Illinois University

Macomb, Illinois 61455

Phone: 309/298-1427 or 298-1967

2. Administrative Location:

College of Health, Physical Education and Recreation

3. Degree(s) Offered in Outdoor Education:

B. S. - Recreation and Park Administration (Concentration in
Outdoor/Environmental Education)

M. S. - Recreation and Park Administration (Concentration in
Outdoor/Environmental Education)

4. Total Number of Faculty, Full-time and Part-time:

Full-time: 10

Part-time: 2

5. Faculty Status and Education of Outdoor Education Faculty, Full-time and Part-time:

Full-time:

Lupton, Jr., Frank D., Professor

B.S. - Harris Teachers College (Elementary Education)

M.S. - University of Illinois (Recreation)

Ph.D. - University of Illinois (Recreation and Park Administration -
Outdoor Education and Camping Emphasis)

--Reeves, John W., Assistant Professor

B.S. - University of Idaho (Botany-Forestry)

M.S. - University of Idaho (Botany)

Ph.D. - Southern Illinois University (Botany)

--Harker, George R., Assistant Professor

B.S. - The Ohio State University (Agriculture)

M.S. - The Ohio State University (Natural Resources)

Ph.D. - Texas A & M University (Recreation and Resources Development)

--Harris, John H., Assistant Professor

B.S. - Humboldt State College (Forest Management)

M.S. - Utah State University (Forest Recreation)

Ph.D. - Utah State University (Outdoor Recreation)

6. Date Department Founded and Date Degree Program(s) Founded in
Outdoor Education:

1967 - Department of Recreation and Park Administration

1967 - B.S. - Recreation and Park Administration (Concentration
in Outdoor/Environmental Education)

1973 - M.S. - Recreation and Park Administration (Concentration
in Outdoor/Environmental Education)

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

B.S. - Recreation and Park Administration - 180 quarter hours
(54 within the major)

-Concentration in Outdoor/Environmental Education - 35 quarter hours plus 24 hours in a related Natural Science, Conservation or Geography minor.

8. Outdoor Education Course Titles and Descriptions:

Leadership in Recreation and Parks: A study of the processes, techniques, and characteristics of leadership in delivery of park and recreation services. Laboratory involved.

Camp Counseling: The aims and objectives of camping, characteristics of campers, and personal qualities of the counselor relative to camp programs and outdoor living skills. Laboratory included.

Principles of Recreation and Park Programming: Explores the purpose and functions of programs, planning principles, objectives, organizational behavior, and evaluation.

Human Resource Management in Leisure Services: Focuses on mobilizing and directing human resources to achieve desired goals in the delivery of leisure services. Considers processes which encourage positive agency-staff public relations.

Travel Workshop: Opportunity for students to observe the operations of a variety of leisure service agencies and to discuss on-location the trends, problems and techniques in leisure service delivery.

Outdoor Recreation: Overview of the scope, organization, program and trends of resource-based recreation. Examines roles of private, local, state, and federal agencies.

Laboratory and field trip required.

Management of Park Resources: Considers management directions, development and maintenance of land areas and resource-based facilities. Examine ecological and social systems affecting the outdoor recreation experience.

Philosophy & Techniques of Interpretation: The course is concerned with developing a basic understanding of the philosophy of interpretation. Interpretive skills are also developed including: effective interpretive talks, visual presentations, elaborate development of exhibits, models and displays. The student is encouraged to develop these skills through first hand experience, outside readings, and visitations to established programs.

Consortium in Outdoor Recreation: Program involving students and faculty from a number of major universities for the purpose of promoting understanding, knowledge, and appreciation of and for agencies and resources relating to outdoor recreation.

9. Total Number of Students Graduated to Date in Outdoor Education Program(s):

60 B. S. - Recreation (Concentration in Outdoor/Environmental Education)

-- M. S. - Recreation and Park Administration - none to date

and Percentage of These Students in Outdoor Education Program(s):

300 B. S. - Recreation and Park Administration

30 B. S. - Recreation and Park Administration (Concentration
in Outdoor/Environmental Education)

30 M. S. - Recreation and Park Administration

3 M. S. - Recreation and Park Administration (Concentration
in Outdoor/Environmental Education)

10% % of Student Enrollment in Outdoor Education Program(s)

11. Future Developments:

The development of the Horn Environmental Laboratory Project (HELP) is a committee composed of representatives from at least 16 departments across campus to develop the Horn Field Campus into an Outdoor and Environmental Education Laboratory. Plans include a 15 acre nature prairie planting, 15 acre old succession meadow with pond, nature trails, a resource center, and interpretive materials. A Master Plan is being developed.

12. Describe any field campus or Environmental Education center used in your program(s):

The university owns Horn Field Campus, a 92 acre property 3 miles south of campus. The campus is 2/3 wooded, 1/3 open field. It has five buildings (2 dorms, 1 lodge and 2 service buildings). It is presently being used for outdoor/environmental education, camp counseling, camp administration and park management classes.

developed by the HELP Committee mentioned above.

BALL STATE UNIVERSITY

1. Name of Contact Person, Title, Location, Mailing Address and

Phone:

Dr. Clyde W. Hibbs

Chairman

Department of Natural Resources

Ball State University

Muncie, Indiana 47306

Phone: 317/285-7162

2. Administrative Location:

College of Sciences and Humanities

3. Degree(s) Offered in Outdoor Education:

B. S. - Natural Resources with the following Options:

-Option 1 - General Resources Management

-Option 2 - Resource Geography

-Option 3 - Fishery Resources Management

-Option 4 - Communications

-Option 5 - Water Quality

-Option 6 - Natural Resources Interpretation

-Teaching Minor in Environmental Conservation

M. A. and M. S. - Natural Resources

4. Total Number of Faculty, Full-time and Part-time:

86

74

Full-time: 8

Part-time: 2

5. Faculty Status and Education of Outdoor Education Faculty,

Full-time and Part-time:

Hibbs, Clyde W., Professor and Chairman

B. S.-West Virginia University (Vocational Agriculture)

M. S.-West Virginia University (Vocational Agriculture)

M. A.-University of Michigan (Conservation and Outdoor Education)

Ph. D.-University of Michigan (Conservation)

--Lyon, Timothy F., Assistant Professor

B. S.-University of Illinois (Zoology)

M. S.-University of Illinois (Wildlife)

Ph. D.-Southern Illinois (Elementary Education/Conservation &
Outdoor Education)

--Mortensen, Charles O.

B. S.-Michigan State University (Forestry)

M. A.-Indiana University (Education)

Ph. D.-University of Wisconsin (Environmental Studies)

--Van Meter, Donald E.

B. S.-Purdue University (Crops and Soils)

M. S.-Michigan State University (Resource Management)

Ed. D.-Indiana University (Adult Education)

6. Date Department Founded and Date Degree Program(s) Founded in
Outdoor Education:

1970 - Institute for Natural Resources

1973 - Name changed to the Department of Natural Resources

1969 - Departmental Major in Natural Resources

1976 - Teaching Minor in Environmental Conservation

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

-B. S. - Major in Natural Resources - 186 hours

-Includes 32 - 36 credit core requirement, approximately 30 credits average requirement for each of the six options, and 28 credits restricted electives.

-Teaching Minor - Environmental Conservation - 36 credits

8. Outdoor Education Course Titles and Descriptions:

Introduction to Natural Resources: The role of natural resources and their relationship to man's social and economic welfare; population growth and its impact upon resource use. The nature and interrelationships of resources with emphasis on the multiple-use concept of resource management. Laboratory and field work included.

Introduction to Outdoor Recreation: A philosophical orientation to the nature and role of outdoor recreation in modern society. The interrelationships of various natural resources with emphasis directed toward multiple-use concepts of management to meet existing and projected outdoor recreation demands. Administration, management, research, survey, planning,

economics, and interpretation of outdoor recreation. One week-end field trip may be required in addition to regular laboratory periods.

Principles of Natural Resources Interpretation: Develop skills and techniques necessary to the interpretation of ecological and environmental characteristics of earth systems. Emphasis on field work and creative presentation of concepts.

Organization and Management of Interpretive Programs: Develops skills and techniques relative to the sound organization and management of interpretive programs, including sites and facilities. Emphasis on planning procedures and field study of existing programs.

Teaching of Conservation: The opportunities for enriching instruction by integrating conservation into all areas of the curriculum, and the contribution teachers can make in developing a conservation-conscious public. Sources of help in teaching conservation, including the use of resource consultants, teaching techniques, and instructional resources that are uniquely appropriate to conservation and outdoor education. Laboratory and field work included.

Practicum in Natural Resources: Supervised practical professional experience relating theory and practice by combining instruction and work activities in natural resources, including conservation education, outdoor education or environmental education.

Special Studies in Natural Resources: An opportunity
to pursue special interests in the area of environmental quality.

9. Total Number of Students Graduated to Date in Outdoor Education
Program(s):

240 B. S. - Major in Natural Resources

-- Teaching Minor in Environmental Conservation - none to date

10. Approximate Number of Total Students in Various Degree Programs
and Percentage of Those Students in Outdoor Education Program(s):

205 B. S. - Major in Natural Resources

-- Teaching Minor in Environmental Conservation - no records
available on this new program

11. Future Developments:

The Department of Natural Resources has requested approval for
the establishment of the following new courses:

-Special Methods for Teaching Environmental Conservation in
the Junior High/Middle School

-Special Methods for Teaching Environmental Conservation in
the Elementary School

-Methods and Materials for Teaching Environmental Conservation
in the Secondary School

-Classroom Utilization of Methods and Materials

-Resident Environmental Education

-The Resource Manager's Role in Information and Education

Programs Anticipated new curricula in this area within the next few years include:

- a. An Area of Endorsement in Environmental and Conservation for Elementary Education Majors
- b. A Supporting Area in Environmental Conservation for Junior High/Middle School Majors
- c. A New Option in Outdoor Recreation
- d. Master of Arts in Education Degree with a Major in Environmental Education

Other anticipated developments include:

- a. More emphasis on research in environmental education
- b. Encourage students to participate in off campus internship experiences
- c. Assist schools and school corporations with the development of outdoor laboratories and also conduct workshops in this area for teachers.

12. Describe any field campus or Environmental Education center used in your program(s):

Ball State University owns the following tracts of land that may be used for outdoor education experiences, however, facilities are not available to conduct a resident program.

- a. Christy Woods (18 acres) located two miles southwest of campus.
- b. Wildlife Preserve (16 acres) located two miles southwest of campus. In addition to the University-owned field areas,

the city of Muncie and vicinity provide study opportunities in such urban environmental concerns as air and water quality, land use planning, and recreational management. Some courses include all day and/or weekend extended field trips to study a variety of environmental problems and programs. The Hayes Regional Arboretum, located 45 miles from campus in Richmond, Indiana, has provided the setting for a number of in-service graduate institutes and workshops for teachers and resource managers.

INDIANA UNIVERSITY

1. Name of Contact Person, Title, Location, Mailing Address and

Phone:

Dr. Theodore R. Deppe

Chairman, Department of Recreation and Park Administration

School of Health, Physical Education and Recreation

Indiana University

Bloomington, Indiana 47401

Phone: 812/337-4711

2. Administrative Location:

School of Health, Physical Education and Recreation

3. Degree(s) Offered in Outdoor Education:

B. S. - Recreation (Concentration in Camping, Outdoor Education,
Conservation)

M. S. - Recreation (Concentration in Camping, Outdoor Education,
Conservation)

Re. Dir. Recreation (Concentration in Camping, Outdoor
Education, Conservation)

Re. D. - Recreation (Concentration in Camping, Outdoor Education,
Conservation)

4. Total Number of Faculty, Full-time and Part-time:

Full-time: 13

Part-time: 3

5. Faculty Status and Education of Outdoor Education Faculty,

Full-time and Part-time:

Rillo, Thomas J., Professor

B. S.-Panzer College (Physical Education and Science)

M. S.-Seton Hall University (Personnel and Guidance)

M. S.-New York University (Outdoor Education)

Ph. D.-Southern Illinois University (Educational Administration)

--Cristie, Robert M., Associate Professor and Director of

Bradford Woods

B. S.-Springfield College (Physical Education)

M. A.-Springfield College (Education - Concentration in Outdoor Education)

Ph. D.-Southern Illinois University (Education Administration and Philosophical Foundations)

--Ross, John M., Assistant Professor and Director of Outdoor Recreation Research Bureau

B. S.-Wisconsin State University - Stevens Point (Conservation)

M. S.-Indiana University (Recreation and Park Administration)

6. Date Department Founded and Date Degree Program(s) Founded

in Outdoor Education

1946 - Department of Recreation

1946 - B. S. - Recreation (Concentration in Camping, Outdoor

Education, Conservation)

1946 - M. S. - Recreation (Concentration in Camping, Outdoor Education, Conservation)

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

- B. S. - Recreation - 124 credit hours
- Concentration in Outdoor Education - 14 credit hours
- Related cognate in Science - 15 credit hours
- M. S. - Recreation - 35 credit hours
- Concentration in Outdoor Education - 18 credit hours plus 12 hours in related cognate
- Related Courses on Elective Basis - 5 credit hours
- Directorate - Recreation - 35 credit hours beyond Masters Degree
- Concentration in Outdoor Education - 18 hours
- Re. D. - Recreation - 90 credit hours
- Concentration in Outdoor Education - 18 credit hours plus 12 hours in related cognate
- Related Cognate Courses - 60 hours

8. Outdoor Education Course Titles and Descriptions:

Dynamics of Outdoor Recreation: Philosophical orientation to the field of outdoor recreation; camping, outdoor education, and natural resource management with emphasis on programs, trends, resources, and values.

Camp Counselor's Training Course: Role of counselors in relation to objectives, organization, guidance, leadership skills, program resources in organized camps.

Camping and Outdoor Recreation Leadership: Examines the role of the leader in camping and outdoor recreation settings. Focuses on counseling and leadership techniques, with direct involvement in outdoor recreation experiences.

Interpretive Resources and Techniques: Refinement of leadership competencies and techniques in interpreting natural and cultural resources required of conservationists, teachers, and other leaders responsible for such interpretation.

Operation and Maintenance of Park and Recreation Facilities: Management, operation, and maintenance of park and recreation areas and facilities.

Outdoor Recreation: Survey of the dynamics of outdoor recreation in American life. Programs, trends, resources, elements of demand, administration, research, planning, economics, and interpretation. Intensive examination of selected public policy issues in outdoor recreation through small group seminars and individual study.

Camping Administration: Organization and administration of camps; program planning, selection and training staff; camp site selection and development; health and safety.

Foundations of Outdoor Education: History, theory, and philosophy of outdoor education. Examination of school and

community programs for various age levels. Opportunity to observe and participate in outdoor education experiences.

Programming in Outdoor Education: Study of camping and outdoor education programs of schools and voluntary agencies. Primary emphasis on program content and method.

Natural Resource Management: Principles and practices of natural resource management applicable to parks and recreation. An opportunity for students to develop an understanding of and appreciation for man's dependence on his natural surroundings, and to recognize the critical role the natural environment plays in satisfying the leisure requirements of man.

Wildlife Management on Recreation Areas: Introduction to problems and methods of wildlife management on natural areas.

9. Total Number of Students Graduated to Date in Outdoor Education

Program(s):

599 B. S. - Recreation
726 M. S. - Recreation
104 Re. Dir. - Recreation
76 Re. D. - Recreation

It is impossible to estimate how many have graduated with a concentration in education/recreation.

10. Approximate Number of Total Students in Various Degree Program(s) and Percentage of Those Students in Outdoor Education Program(s):

288 B. S. - Recreation

96 B. S. - Recreation (Concentration in Camping, Outdoor Education, Conservation)

33 1/3% % of Student Enrollment in Outdoor Education Program

42 M. S. - Recreation

11 M. S. - Recreation (Concentration in Camping, Outdoor Education, Conservation)

11. Future Developments:

A research proposal has been developed for the construction of a Learning Resource Center at Bradford Woods, Indiana University's Outdoor Education and Camping area, and has been endorsed by the Board of Trustees at Indiana University. Plans are being formulated for the promotion and funding of the Center.

12. Describe any field campus or Environmental Education center used in your program(s):

Bradford Woods is Indiana University's 2300-acre tract of timberland near Martinsville, Indiana, where Camp Riley for Physically Handicapped Children is located. Much of the camp's \$1 million capital expansion program has been completed and future Riley campers can look forward to some of the finest facilities the physically handicapped anywhere. New in 1976 are the Arts and Crafts Center, Nature Center Dining Hall, Swimming Pool for the Developmentally Disabled, an additional Nature Trail, and two bridges on existing trails.

PURDUE UNIVERSITY

1. Name of Contact Person, Title, Location, Mailing Address and

Phone:

Dr. Douglas M. Knudson

Associate Professor of Forestry

Purdue University

West Lafayette, Indiana 47907

Phone: 317/749-2433

2. Administrative Location:

Department of Forestry & Natural Resources

School of Agriculture

3. Degree(s) Offered in Outdoor Education:

B. S. - Recreation Resources (Emphasis in Environmental Interpretation)

M. S. - Recreation Resources (Emphasis in Environmental Interpretation)

Ph. D. - Recreation Resources (Emphasis in Environmental Interpretation)

4. Total Number of Faculty, Full-time and Part-time:

The forestry faculty provides various courses related to this program. Other faculty on the campus are used in various

courses involved in the program. There are two full-time faculty members in outdoor recreation, one emphasizing

sociological aspects; the other emphasizing administrative and interpretive aspects. One full-time extension worker teaches a course on a part-time volunteer basis that is related to the program.

5. Faculty Status and Education of Outdoor Education Faculty,

Full-time and Part-time:

Knudson, Douglas M., Associate Professor

B. S.-Colorado State University (Forestry)

M. S.-Colorado State University (Forestry)

Ph. D.-Purdue University (Forest Economics)

--O'Leary, Joseph T., Assistant Professor

B. S.-New Brunswick University (Forestry)

M. S.-Yale University (Forest Sociology)

Ph. D.-University of Washington (Forestry)

--Jones, Gordon F., Assistant Professor

B. S. Ed.-Purdue

M. S.-Purdue

--Corbin, H. Dan, Professor of Recreation Education

B. S.-Alabama (Recreation)

M. A.-Columbia

Ph. D.-New York University

6. Date Department Founded and Date Degree Program(s) Founded in
Outdoor Education:

1920 - Department of Forestry & Natural Resources

1955-60 - Degree programs in Conservation

1975 - B. S. - Recreation Resources (Emphasis in Environmental Interpretation) The last program was in evolution from the Conservation program which offered work in Environmental Interpretation.

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

B. S. - Recreation Resources - 134 semester hours

-Environmental Interpretation - 27 semester hours of the 134

8. Outdoor Education Course Titles and Descriptions:

Environmental Interpretation: Study of principles and techniques related to interpretation, emphasizing development of skills as a capping off course for professionally oriented students in their senior year.

Interpretive Practicum: Supervised field interpretation at the Tippecanoe Battlefield, in cooperation with Purdue Recreation and Parks Association Project. This course is taken over several years on a repeat basis by selected students.

Social Recreation Leadership: Principles and practices of leading informal recreational groups in social, musical and dramatic activities; resources, materials, and attitudes.

In addition to these courses, students take additional courses in natural history, resource management, communications, and humanities.

9. Total Number of Students Graduated to Date in Outdoor Education

Program(s):

89

60 B. S. - Conservation - These were not specifically designated as Interpretation Specialists. The first graduates of the B. S. program in Recreation Resources will graduate in 1977.

3 M. S. - Recreation Resources (Emphasis in Environmental Interpretation)

1 Ph. D. - Recreation Resources (Emphasis in Environmental Interpretation)

10. Approximate Number of Total Students in Various Degree Programs and Percentage of Those Students in Outdoor Education Program(s):

170 B. S. - Recreation Resources

65 B. S. - Recreation Resources (Emphasis in Environmental Interpretation)

50% % of Student Enrollment in Outdoor Education Program(s)

11. Future Developments:

Purdue University expects to see greater involvement of the Department of Education and stronger ties with community groups in making opportunities for education training and practice available to undergraduate students. Future emphasis will probably be on the undergraduate program more than the graduate program.

Close cooperation with the Indiana Division of State Parks, naturalist program, will continue and intensify, as will

relationships with several county park boards, the National Park Service, The Nature Conservancy, and other groups using interpretive services.

12. Describe any field campus or Environmental Education center used in your program(s):

Purdue University owns several tracts of land near the campus, where nature trails are maintained and guided tours are conducted. Two student organizations are active in leading tours for community groups. The close cooperation with the Tippecanoe Battlefield Historical group is involving about 20 students per year in development of a historical/environmental education program for the general public and for groups. A new forestry campus in the southern part of Indiana has potential for future development of its interpretive facilities and programs in cooperation with the U. S. Forest Service.

EASTERN KENTUCKY UNIVERSITY

1. Name of Contact Person, Title, Location, Mailing Address and

Phone:

Dr. James C. McChesney

Chairman

Department of Recreation and Park Administration

Begley 411

Eastern Kentucky University

Richmond, Kentucky 40475

Phone: 606/622-5975

2. Administrative Location:

School of Health, Physical Education, Recreation and Athletics

3. Degree(s) Offered in Outdoor Education:

B. S. - Recreation Administration (Emphasis in Outdoor/Environmental Education)

M. S. - Recreation and Park Administration (Emphasis in Outdoor/Environmental Education)

4. Total Number of Faculty, Full-time and Part-time:

Full-time: 6

Part-time: 0

5. Faculty Status and Education of Outdoor Education Faculty,

Full-time and Part-time:

Full-time:

Stephan, Sheryl Jo, Associate Professor

B. S.-MacMurray College (Physical Education)

M. A.-University of Iowa (Recreation)

Re. D.-Indiana University (Recreation and Park Administration)

--Ogden, Marion, Assistant Professor

B. M.-Baylor University (Music)

M. R. E.-Southern Baptist Theological Seminary (Religion)

M. S.-Memphis State University (Recreation)

Re. D.-Indiana University (Recreation)

6. Date Department Founded and Date Degree Program(s) Founded

in Outdoor Education:

1969 - Department of Recreation and Park Administration

1969 - Emphasis in Outdoor/Environmental Education

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

B. S. - Recreation - 128 semester hours

Emphasis in Outdoor/Environmental Education - 27 semester hours

Related cognate in Natural Sciences - 12 semester hours

M. S. - Recreation - 30 semester hours

Outdoor Programming - 9 semester hours

Administration - 9 semester hours

Related cognate - 12 semester hours

8. Outdoor Education Course Titles and Descriptions:

Recreation Methods and Materials in Environmental

Education: Primary emphasis on learning experiences in the out-of-doors. Urban and rural outdoor environments are surveyed as learning laboratories in a variety of subject-matter areas. Objects for outdoor experiences are developed and field trips are planned.

Recreation Environmental Education Programs: Philosophy, policies, and procedures of organizing and conducting school centered environmental education programs. Emphasis is placed on program services which are year-round, including resident outdoor schools and day services provided by recreation and environmental agencies for school groups.

Camp Counseling: Concentration is on knowledge of the camping movement, leadership, and camp counseling techniques. Practical experiences are required including a weekend overnight.

Camp Administration: Camp organization, business management, staffing, and program administration for different types of camps. Selection and development of camp sites.

Recreation Workshops: Identification and study of specialized techniques in recreation leadership, activity skills, operational methods, and services.

Professional Field Experience: Students work in a recreation agency to observe and conduct activities. Through this training the student has the opportunity to test concepts

developed in his regular class work and to develop competencies essential to successful professional recreation leadership.

Practicum in Recreation: Supervised practical work experience in a clinical or administrative setting.

Seminar: Problems in Recreation: Extensive collection and analysis of data concerning issues, trends, or problems that should be solved by the profession.

Special Recreation Problems Seminar: Operation problems and solutions encountered by beginning workers and middle management are discussed and solved through individual student research and class discussion.

9. Total Number of Students Graduated to Date in Outdoor Education Program(s):

65 B. S. - Recreation (Emphasis in Outdoor/Environmental Education)

12 M. S. - Recreation (Emphasis in Outdoor/Environmental Education)

10. Approximate Number of Total Students in Various Degree Programs and Percentage of Those Students in Outdoor Education Program(s):

265 B. S. Recreation

20% % of Student Enrollment in Outdoor/Environmental Education Emphasis

28 M. S. Recreation

35% % of Student Enrollment in Outdoor/Environmental Education Emphasis

11. Future Developments:

Developing an 1800 acre site with a lodge and 15 acre lake 25 miles from campus. Lodge and lake were finished in November, 1976. Also, we have 15 acre site consisting of shelter house, rest room, and storage room combination building and two group cabins at the edge of this city 2 miles from the main campus.

12. Describe any f campus or Environmental Education center used in your program(s):

Developing an 1800 acre Environmental Center site that includes a lodge and 15 acre lake.

WESTERN KENTUCKY UNIVERSITY

1. Name of Contact Person, Title, Location, Mailing Address and

Phone:

Dr. Alton Little

Associate Professor

or

Dr. William Biff Kummer

Assistant Professor of Recreation

Recreation Curriculum

Western Kentucky University

Bowling Green, Kentucky 42101

Phone: 502/745-3591

2. Administrative Location:

Department of Physical Education and Recreation

3. Degree(s) Offered in Outdoor Education:

B. S. - Recreation and Park Administration (Concentration in
Outdoor Recreation/Education)

4. Total Number of Faculty, Full-time and Part-time:

Full-time: 4

Part-time: 0

5. Faculty Status and Education of Outdoor Education Faculty,

Full-time and Part-time:

Full-time:

Little, Alton D., Associate Professor

B. S.-East Carolina University (Physical Education)

M. A.-East Carolina University (Physical Education)

Ed. D.-University of Georgia (Recreation and Park Administration)

--Kummer, William Biff, Associate Professor

B. A.-Parsons College (Physical Education)

M. S.-University of Utah (Recreation)

Ph. D.-University of Utah (Leisure Studies)

--Crume, Charles, Assistant Professor

B. S.-Western Kentucky University (Recreation)

M. P. S.-Western Kentucky University (Recreation and Park Administration)

--Verner, Jo Ann, Instructor

B. S.-Virginia Commonwealth University (Recreation)

M. P. S.-Western Kentucky University (Recreation and Park Administration)

6. Date Department Founded and Date Degree Program(s) Founded

in Outdoor Education:

1966 - Recreation Curriculum

1966 - B. S. - Recreation (Concentration in Outdoor Recreation/Education)

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

-B. S. - Recreation - 128 semester hours

-Concentration in Outdoor Recreation/Education - 20 semester hours

8. Outdoor Education Course Titles and Descriptions:

Outdoor Recreation Activities: To acquaint the student with basic outdoor recreation activities (i.e.) climbing techniques, scuba. A variety of outdoor experiences conducted in a laboratory setting will be provided to reinforce class lectures. Values of outdoor experiences will be emphasized throughout the course. This course is open to all students and especially recommended for all recreation majors and minors and all physical education majors and minors.

Introduction to Outdoor Education: A study of the concepts and fundamentals of teaching in the out-of-doors. An emphasis is placed on outdoor education experiences.

Principles of Outdoor Recreation: Values and extent of outdoor recreation. An overall view of outdoor recreation philosophy based on legislation, geographic factors, land use, standards, agencies and economics.

Camp Administration: Status, purpose, and administration of organized camping. Topics include history and trends, selection and training of staff and health and safety considerations, etc.

Development of Nature Oriented Areas and Facilities:

A study of nature trail design and preparation, live and inanimate exhibit design and preparation, resource inventory, building, exhibit material purchase, vandalism, and other problems related to the development of nature oriented areas and facilities.

Techniques in Outdoor Education: A study of the importance

of field trips, nature films, audio-visual aids and interpretive materials and programs in the development of outdoor education as a recreation activity.

Recreation Workshop: A course designed to study a skill

in depth as it relates to the recreation profession. Course will deal with certifiable areas either from national organizations or a university curriculum certificate.

Internship in Recreation: Experience in recreation

planning, leadership, supervision and program evaluation through work in recreation, park, and other leisure oriented settings. This in-service experience is supervised and controlled by University faculty members and personnel from area recreation agencies. The eight hours professional field experience is required for the recreation major and/or area of concentration by the student.

Independent Investigations in Recreation: Special research

problems of projects or organizational, administrative, or supervisory nature in the area of recreation.

Master's Thesis: The master's thesis is to be directed by a member of the Graduate Faculty of the Recreation Curriculum.

9. Total Number of Students Graduated to Date in Outdoor Education

Program(s):

-- Information unavailable because this option was not defined in the past and students could elect courses in their interest areas.

10. Approximate Number of Total Students in Degree Programs and Percentage of Those Students in Outdoor Education Program(s):

320 B. S. - Recreation

65 B. S. - Recreation (Concentration in Outdoor Recreation/ Education)

20% % of Student Enrollment in Outdoor Education Program(s)

11. Future Developments:

An outdoor multi-purpose learning laboratory is being considered by the Department and University. Upgrading and strengthening the academic courses and providing additional faculty are continued priorities within the Curriculum.

12. Describe any field campus or Environmental Education center used in your program(s):

The university and department do not presently have an outdoor laboratory. However, we extensively use a Boy Scout reservation (1200 acres) and Land Between the Lakes, Tennessee

Valley Authority land for our in-field experiences and workshops. Both are excellent facilities and provide the basis for a variety of exposures and training.

NORTHWESTERN STATE UNIVERSITY OF LOUISIANA

1. Name of Contact Person, Title, Location, Mailing Address and Phone:

Dr. Warren R. Evans

Professor of Outdoor Education and Recreation

Division of Outdoor Education and Recreation

Northwestern State University

Natchitoches, Louisiana 71457

2. Administrative Location:

Department of Health, Physical Education and Recreation

College of Education

3. Degree(s) Offered in Outdoor Education:

M.S. - Education (Major in Outdoor Education)

4. Total Number of Faculty, Full-time and Part-time:

Full-time: 2

Part-time: 0

5. Faculty Status and Education of Outdoor Education Faculty, Full-time and Part-time:

Evans, Warren R., Professor

B.S. - University of Maryland (Health and Physical Education)

M.Ed. - University of Maryland (Educational Supervision)

Ed.D. - University of Maryland (Health and Physical Education)

--Hillard, Joyce, Associate Professor

B.S. - Louisiana State (Health and Physical Education)

M.Ed. - Louisiana State (Health and Physical Education)

Ph.D. - University of Utah (Health and Physical Education)

6. Date Department Founded and Date Degree Program(s) Founded in Outdoor Education:

1969 - Division of Outdoor Education and Recreation

1969 - B.S. - Education (Major in Outdoor Education)

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

M.S. - Education (Major in Outdoor Education) - 33 semester hours

8. Outdoor Education Course Titles and Descriptions:

Introduction to Outdoor Education: Development of outdoor education including philosophy, local organization, financing, staffing, existing programs, objectives and procedures.

Environmental Biology and Recreation: Field experience in recreation and biology, including elements of outdoor living; study of plants, animals, and topographic formations; techniques of collecting and preserving organisms; collection of data and preparation of a formal report. Planning and followup periods 1 week each; extended field trip to Texas, New Mexico and Arizona, 4 weeks.

Outdoor Education and Recreation: Principles and program practice with special emphasis on school-centered outdoor education and recreation programs.

Field Experience: Experience in working in both public and private recreation programs. The summer session will require 9 weeks of work in University-approved agencies.

Research Problems: Non-degree credit. May be repeated.

Thesis:

9. Total Number of Students Graduated to Date in or Education

Program:

30 M.S. - Education (Major in Outdoor Education)

10. Approximate Number of Total Students in Various Degree Programs and
Percentage of Those Students in Outdoor Education Program(s):

11. Future Developments:

No specific plans for changing the program in the near future.

12. Describe any field campus or Environmental Education center used in
your program(s):

Have 50 acre site set aside as Outdoor Education Center, but have not
been able to develop planned nature trails and outdoor laboratory
facilities to date.

UNIVERSITY OF MAINE AT ORONO

1. Name of College File, Location Building Phone:

Mr. John W. Butzow

Associate Professor of Science and Environmental Education

206 Shibles Hall

College of Education

University of Maine at Orono

Orono, Maine 04473

Phone: 207/581-7020

2. Administrative Location:

College of Education

3. Degree(s) Offered in Outdoor Education:

M.Ed. - Environmental Education

Ed.D. - Science Education (Options in Environmental Education and/or Marine Education)

4. Total Number of Faculty, Full-time and Part-time:

Full-time: 2

Part-time: 1

5. Faculty Status and Education of Outdoor Education Faculty, Full-time and Part-time:

Butzow, John W., Associate Professor

B.S. - St. Bonaventure University (Chemistry)

M.S. - St. Bonaventure University (Organic Chemistry)

- University of Rochester (Science Education)
- Vis., George T., Professor
- B.S. - Pennsylvania State University (Geology)
- M.S. - Pennsylvania State University (Science Education)
- Ed.D. - Harvard University (Science Education)

Part-time:

Bennett, Dean B., Lecturer

- B.S. - University of Maine Portland-Gorham (Industrial Arts)
- M.S. - University of Maine Portland-Gorham (Science Education)
- Ph.D. - University of Michigan (Environmental Education)

6. Date Department Founded and Date Degree Program(s) Founded in Outdoor Education:

- 1975 - M.Ed. - Environmental Education
- 1969 - Ed.D. - Science Education (Options in Environmental Education and/or Marine Education)

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

- M.Ed. - Environmental Education - 33 hours
- Ed.D. - Science Education (Options in Environmental Education and/or Marine Education) - Variable, approximately 60 hours post Master's degree

8. Outdoor Education Course Titles and Descriptions:

Workshop in Conservation Education: A summer session workshop concentrating on outdoor-environmental education activity programs such as the Outdoor Biology Instructional Strategies Program (OBIS).

Studies in the Earth Sciences (Elementary): Science content course for elementary school teachers. Work involves a series of elementary laboratory and field studies in astronomy, geology; meteorology and soils. Topics will be those that can be explored through direct observation and study. Discussions, films and library assignments scheduled to supplement work in laboratory and field.

Studies in the Earth Sciences (Secondary): Studies included are intended for elementary and secondary teachers who need introductory information in the earth sciences of geology, meteorology and soils. Where possible, studies are in a natural setting with appropriate equipment and materials. Lectures, films and library assignments scheduled to supplement fieldwork.

Basic Field Ecology: Course designed for secondary school science teachers with a broad background in the natural sciences and for qualified elementary school teachers who desire studies beyond those ordinarily included in introductory natural history courses. Course involves accumulating, interpreting and applying data acquired from the natural environment. Program intended to serve teachers conducting studies in the Green Version of BSCS biology.

Natural Science Education -- Coastal (Elementary): Primarily for elementary school teachers. Field studies of plants, animals, rocks, minerals, stars, weather, and marine life of the Maine coast. Areas are selected with the needs of the elementary school teacher in mind. Lectures and library work will supplement field studies.

Natural Science Education -- Coastal (Secondary): Primarily for secondary school teachers.

Natural Science Education -- Inland (Elementary): Lectures, library work, field studies in natural history of inland Maine. General ecology, geology, weather and climate will be studied. Opportunity to study various types of habitats found in Maine. Course directed to the elementary school teacher. Only in the Summer Session.

Natural Science Education -- Inland (Secondary): Primarily for general science and biology teachers in the secondary school.

9. Total Number of Students Graduated to Date in Outdoor Education

Program(s):

6 M.Ed. - Environmental Education

0 Ed.D. - Science Education (Options in Environmental Education and/or Marine Education)

10. Approximate Number of Total Students in Various Degree Programs and Percentage of Those Students in Outdoor Education Program(s):

11. Future Developments:

We are in the process of obtaining a full-time appointment for our part-time faculty member. As that occurs we will add three more graduate courses in outdoor/environmental education.

12. Describe any field campus or Environmental Education center used in your program(s):

We utilize the Maine Conservation School located in Bryant Pond, Maine, as a field campus. In addition, our main campus at Orono is in a rural setting, thus providing a nature area at our doorstep.

CATONSVILLE COMMUNITY COLLEGE

1. Name of Contact Person, Title, Location, Mailing Address and Phone:

Mr. Larry R. Williams

Coordinator of Leisure Studies and Activities

Catonsville Community College

800 South Rolling Road

Baltimore, Maryland 21228

Phone: 301/455/4199

2. Administrative Location:

Division of Applied Life, Leisure and Sports Studies

3. Degree(s) Offered in Outdoor Education:

A.A. - Recreation and Parks (Option in Outdoor Education)

4. Total Number of Faculty, Full-time and Part-time:

Full-time: 3

Part-time: 4

5. Faculty Status and Education of Outdoor Education Faculty, Full-time and Part-time:

All Leisure Studies Faculty, full and part-time (8), are involved in the Outdoor Education Option.

6. Date Department Founded and Date Degree Program(s) Founded in Outdoor Education:

1965 - Department of Leisure Studies and Activities

1972 - A.A. - Recreation and Parks (Option in Outdoor Education)

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

A.A. - Recreation and Parks - 65 credit hours

Option in Outdoor Education - 14 credit hours plus 9 hours related cognate

Related cognate in Natural Sciences - 12 hours

8. Outdoor Education Course Titles and Descriptions:

Fundamentals of Interpretive Services: Designed to acquaint the student with the basic concepts of environmental education, ecology and interpretation through a practical approach studying subjects as use and preparation of audio visual materials, interpretive techniques, and programs. Opportunities for actual leadership in interpretative experiences will be available in the campus outdoor education area.

Current Issues and Problems in Leisure Services: Concerned with an analysis and study of current issues and problems related to recreation, parks, outdoor education, and leisure services.

Introduction to Leisure Services: Develops the student's understanding and appreciation of the historical, philosophical, sociological and cultural foundations of leisure, recreation and parks in today's modern society. The course familiarizes the student with professional career opportunities, professional organizations and literature.

9. Total Number of Students Graduated to Date in Outdoor Education Program(s):

16 A.A. - Recreation and Parks (Option in Outdoor Education)

10. Approximate Number of Total Students in Various Degree Programs and Percentage of Those Students in Outdoor Education Program(s):

120 A.A. - Recreation and Parks

18 A.A. - Recreation and Parks (Option in Outdoor Education)

15% % of student enrollment in Outdoor Education Program(s)

11. Future Developments:

Catonsville Community College is pursuing the development of an Outdoor Education/Interpretive Center on campus which will be utilized for college interdisciplinary studies in outdoor education/natural sciences. Local school environmental education programming and community usage is anticipated for the facility. Courses and programs are under study to be offered as a part of Wallops Island Consortium.

12. Describe any field campus or Environmental Education center used in your program(s):

The college has a 30 acre outdoor education/environmental studies area located on the perimeter of the campus. An Interpretive/Outdoor Education Center is planned for the near future which will be utilized by college programs and the local school system. The Patapsco Valley State Park, an 11,000 acre, 30 mile long state park, borders the college property, offering unlimited opportunities for outdoor education study. The outdoor education study area includes shelters, extensive trail system, obstacle course, an environmental fitness trail, and several historical structures for study. The environmental study area is utilized in the summer for Camp Heritage, an environmental day camp which offers unique outdoor education/camp experiences to over 400 children. Outdoor education students satisfying their directed field work experience act as counselors and resource individuals.

UNIVERSITY OF MARYLAND

1. Name of Contact Person, Title, Location, Mailing Address and Phone:

Dr. Craig W. Colton

Assistant Professor

Department of Recreation

University of Maryland

College Park, Maryland 20742

Phone: 301/454-5521

2. Administrative Location:

College of Physical Education, Recreation and Health

3. Degree(s) Offered in Outdoor Education:

B.S. - Recreation (Concentration in Outdoor Recreation/Interpretive Services - Environmental Education)

M.A. - Recreation (Emphasis or Cognitive area in Outdoor Recreation/Interpretive Services - Environmental Education)

Ph.D. - Recreation (Emphasis or Cognitive area in Outdoor Recreation/Interpretive Services - Environmental Education)

4. Total Number of Faculty, Full-time and Part-time:

Full-time: 12

Part-time: 12

5. Faculty Status and Education of Outdoor Education Faculty, Full-time and Part-time:

Full-time:

Colton, Craig W., Assistant Professor

B.S. - Utah State University (Forestry)

M.S. - Utah State University (Forest Recreation)

Ph.D. - Utah State University (Outdoor Recreation)

--Kuss, Fred R., Associate Professor

B.S. - University of New Hampshire (Forestry)

M.S. - University of New Hampshire (Botany)

Ph.D. - Cornell University (Applied Botany)

--Thompson, Jr., James C., Assistant Professor

B.A. - Mississippi State University (General Liberal Arts)

M.S. - Colorado State University (Natural Resource Based Recreation)

Ph.D. - Colorado State University (Natural Resource Based Recreation)

6. Date Department Founded and Date Degree Program(s) Founded in Outdoor Education:

1966 - Department of Recreation

1966 - B.S., M.A., Ph.D. - Recreation (Concentration in Outdoor Recreation/Interpretive Services - Environmental Education) Degree requirements have evolved over time.

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

Present Curriculum - B.S. degree

B.S. - Recreation - 130 semester hours

Concentration in Outdoor Recreation/Interpretive Services - Environmental Education - 12 semester hours

Natural and Physical Sciences - 6 to 12 semester hours

Curriculum planned for implementation Fall 1977 (may be subject to slight revision) - B.S. degree

B.S. - Recreation - 126 semester hours

Concentration in Outdoor/Interpretive Services or Environmental -

Outdoor Education - 33 semester hours including 15 hours in environmental and natural sciences.

Plus field work or internship to provide experiential learning in area of concentration - 14 semester hours (required to major in Recreation).

Additional courses in Natural and Physical Sciences required by University - 6 to 12 semester hours.

M.A. - Recreation - 30 hours beyond baccalaureate

Ph.D. - Recreation - 90 hours beyond baccalaureate

8. Outdoor Education Course Titles and Descriptions:

Nature Interpretation: An introductory orientation to the principles and techniques used for interpretation of environmental, natural, historical and other features of recreation and park facilities to the visitor.

Historical and Natural Interpretation: Examination of the philosophies of and techniques appropriate to historical and natural interpretation. Analysis and development of interpretive programs and visitor information services.

Outdoor Education: Field experience and resident camping in an outdoor setting will be used to present the activities and techniques recommended for modern outdoor education practice. Where possible, groups of participants will be utilized as subjects for practice instructional work. Activity will emphasize not only the subject matter of science and education but also the broad concepts of conservation, worthy use of leisure time, education for democratic living, etc.

Field Work I: Practical field experience in developing activity leadership skills at an organized department or agency in the student's area of concentration.

Field Work II: Leadership activity and participation in staff activities and responsibilities. Observation and fieldwork placement selected on the basis of the student's interest and future employment plans.

Field Laboratory Projects and Workshop: Designed to meet the needs of persons in the field with respect to workshops and research projects in special areas of knowledge not covered by regularly structured courses. Through this course students can do additional study in their areas of concentration.

Introduction to Resource and Facility Planning: A survey of the basic principles of planning, design, development and maintenance of recreation areas and facilities.

Design, Development and Maintenance of Recreational Areas: A survey of past and current principles of design, development, procedures, and maintenance considerations for recreation areas and facilities. This will include an emphasis on the understanding and use of analytical methods used to carry out park designs and will develop skills in graphically conveying design concepts.

Recreational Use of Natural Areas: An introductory orientation to the outdoor recreation phenomenon, including: factors stimulating outdoor recreation involvement; federal, state, local, public and private departments and agencies managing outdoor recreation areas; legislation, philosophical concepts, and planning and management issues.

Concepts and Issues in Outdoor Recreation: A survey of the relationships between land, leisure and people as increasingly vital and interdependent issues in American civilization.

Additional interpretive/environmental education classes planned for development:

Interpretive Program Planning:

Interpretive Exhibit Design and Preparation:

Advanced Interpretive Programming and Planning:

9. Total Number of Students Graduated to Date in Outdoor Education

Program(s):

B.S. - Recreation (Outdoor Recreation/Interpretive Services - Environmental Education Concentration) - no count available

M.A. - Recreation (Emphasis or Cognitive area in Outdoor Recreation/Interpretive Services - Environmental Education) - no count available

Ph.D. - Recreation (Emphasis or Cognitive area in Outdoor Recreation/Interpretive Services - Environmental Education) - no count available

10. Approximate Number of Total Students in Various Degree Programs and Percentage of Those Students in Outdoor Education Program(s):

550 B.S. - Recreation

2-5% % of student enrollment in B.S. - Recreation (Concentration in Outdoor Recreation/Interpretive Services - Environmental Education)

100 M.A. - Recreation

16% % of student enrollment in M.A. - Recreation (Emphasis or Cognitive area in Outdoor Recreation/Interpretive Services - Environmental Education)

129

117

11. Future Developments:

The interpretive services - environmental education program in the Department of Recreation is currently being increased in size and scope. More classes and other learning opportunities are being developed and offered. The curriculum is being revised to accommodate these changes. Nearby agencies with excellent field experiences and environmental education programs cooperate with the Department in providing opportunities for student learning and development. Cooperative interdisciplinary efforts will continue improving this area of emphasis in the future.

12. Describe any field campus or Environmental Education center used in your program(s):

The University campus has a 50 acre wooded area currently being used by interpretive services - environmental education classes. Continued use is being incorporated into the area master plan. An Environmental Planning Center will be operated by Department faculty starting Summer 1977 at least and each summer thereafter.

GREENFIELD COMMUNITY COLLEGE

1. Name of Contact Person, Title, Location, Mailing Address and

Phone:

Larry Buell

Assistant Professor of Recreation Leadership

Recreation Leadership Department

Director, Center for Environmental Awareness

Greenfield Community College

Greenfield, Massachusetts 01301

Phone: 413/774-3131, Ext. 349

2. Administrative Location:

Division of Behavioral Sciences

3. Degree(s) Offered in Outdoor Education:

A. S. - Recreation Leadership (Emphasis in Environmental Recreation)

4. Total Number of Faculty, Full-time and Part-time:

Full-time: 3

Part-time: 2

5. Faculty Status and Education of Outdoor Education Faculty,

Full-time and Part-time:

Buell, Larry, Assistant Professor

B. S.-Springfield College (Education)

M. S.-Pennsylvania State University (Outdoor Education)

6. Date Department Founded and Date Degree Program(s) Founded
in Outdoor Education:

1966 - Recreation Leadership Department

1974 - Emphasis in Environmental Recreation

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

-A. S. - Recreation Leadership - 63 semester hours

-Emphasis in Environmental Recreation - 19 semester hours

8. Outdoor Education Course Titles and Descriptions:

Environmental Recreation: Analyze the meaning and significance of Environmental Recreation in contemporary society, with concern for a variety of age groups and special populations. Emphasis upon planning, organizing, conducting and evaluating programs and activities in the areas of Outdoor Recreation, Outdoor Education, and Environmental Education. Special concern for the practical activities and experiences in the out-of-doors through laboratories, field trips, and leadership practice in the areas of nature-oriented activities, outing sports, and environmental education. Environmental awareness and action through ecological approach will be inherent in the course. A variety of field trips and outings in the Connecticut River Valley and Central New England area are significant components of the course.

First-Aid: Diagnosis and treatment of emergency needs of the human body. Approved for American National Red Cross

certification in Standard First Aid and Personal Safety as well as Cardiopulmonary Resuscitation.

Survival: An introduction to the basic techniques and methods of human survival in city, suburbs and backlands. Direct experience laboratories will focus upon the interaction of weather, terrain, body limitations and personal attitude in solving survival problems. A range of human situations will be studied and analyzed including, but not limited to, psychological stress, problem indicators, problem analysis, survival in cold and hot environments, general survival and body energy.

Field Work I, II, III, IV: Experience in planning, organizing, conducting, and evaluating programs in outdoor recreation, outdoor education and environmental education at the Center for Environmental Awareness.

Swimming: The art of swimming; emphasis on skill development and complementary water safety techniques. Course is available to all students, regardless of their present swimming ability. Approved for American Red Cross certification.

Advanced Life Saving: The fundamentals of rescue and water safety including the practical application thereof. Course leads to American National Red Cross certification in Advanced Life Saving.

Basic Flat Water Canoeing: Skills and strategems of modern flat water canoeing; emphasis on safety and skill development and fun in tandem paddling, as well as solo paddling. Approved certification.

Basic White Water Canoeing: Skills and strategems of modern river canoeing; emphasis on safety, skill development and fun in tandem paddling.

Nature Interpretation: An introduction to the interpretation of the natural and cultural environment, including specific leadership techniques and related methods and materials of nature interpretation. A problem centered course with direct experience in the field.

Hiking and Backpacking: An introduction to the basic skills and techniques of hiking and backpacking. Focus will be upon use and selection of backpacking equipment, camp cookery, first aid and safety, tool craft, orienteering (map and compass), and wilderness survival. The course will stress skills for personal leisure activity and outdoor leadership, as well as concerns for environmental awareness and understanding. In the field labs will take place in the back country of Franklin County and a four-day backpacking trip to the White Mountain National Forest in New Hampshire.

Winter Camping: The challenge adventure activity of winter camping for the beginning cold weather wilderness traveler. Deals with the techniques of exploring and living in the white wilderness.

Outdoor Challenge/Adventure Education: An introduction to basic challenge/adventure activities. Focus will be upon physical, mental and social challenge as a vehicle to individual confidence, group cooperation and environmental

understanding. Activities and experiences include the philosophy of challenge/adventure, as well as: experiential learning through ropes course, initiative problems, rock climbing, river crossing, solo experience and group problem solving.

Rock Climbing: An introduction to the philosophy, skills and techniques of basic rock climbing. Laboratory sessions will stress the activities of bouldering, top-rope climbing and rappelling. Participants will gain adequate experience to use the sport of rock climbing as a leisure time activity.

Cross Country Skiing: A basic course in equipment, clothing, waxing and techniques of cross country skiing. Focus on skiing in different snow and terrain conditions. Emphasis will be on leisure time skiing as well as skiing under full pack.

Independent Study in Outdoor Leadership: Focus upon the theory and practice of modern outdoor leadership techniques. Field experience in leading a wide variety of populations in outdoor pursuits, from sense awareness to hi-risk outing sports.

9. Total Number of Students Graduated to Date in Outdoor Education Program(s):

20 · A. S. - Recreation Leadership (Emphasis in Environmental Recreation)

10. Approximate Number of Total Students in Various Degree Programs and Percentage of Those Students in Outdoor Education Program(s):

73. Recreation Leadership

18. Emphasis in Environmental Recreation

11. Future Developments:

The College is developing a Center for Environmental Awareness which will conduct programs within the College and within the community. Focus on outdoor leadership training.

12. Describe any field campus or Environmental Education center used in your program(s):

Facilities include several camps and various community buildings.

An urban Center is planned to house the Urban Environmental Education component of the program.

NORTHEASTERN UNIVERSITY

1. Name of Contact Person, Title, Location, Mailing Address and

Phone:

Dr. Albert McCay

Department of Recreation Education

Boston-Bouve' College

3 DK

Northeastern University

360 Huntington Avenue

Boston, Massachusetts 02115

2. Administrative Location:

Boston-Bouve' College for Health, Physical Education, Physical
Therapy, and Recreation

3. Degree(s) Offered in Outdoor Education:

B. S. - Education (Concentration in Outdoor Recreation/Education)

M. S. - Education (Concentration in Recreation, Minor in
Outdoor Recreation/Education)

4. Total Number of Faculty, Full-time and Part-time:

Full-time: 8

Part-time: 3

5. Faculty Status and Education of Outdoor Education Faculty,

Full-time and Part-time:

Full-time:

Jeffrey, Howard, Associate Professor

B. A.-Colgate University (Psychology)

M. A.-New York University (Recreation)

Re. D.-Indiana University (Recreation)

--Dawson, Sylvia, Instructor

B. S.-Edinboro State College (Elementary Education)

M. S.-Northeastern University (Recreation)

--Atkinson, George, Instructor

B. S.-Springfield College (Physical Education)

M. S.-Northeastern University (Recreation)

6. Date Department Founded and Date Degree Program(s) Founded in
Outdoor Education:

1965 - Department of Recreation Education

1965 - B. S. - Education (Concentration in Outdoor Recreation/
Education)

1969 - M. S. - Education (Concentration in Recreation, Minor
in Outdoor Recreation/Education)

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

-B. S. - Education (Concentration in Outdoor Recreation/
Education - 172⁶ quarter hours

-Concentration in Outdoor Recreation/Education - 18 quarter
hours plus 12 related cognate and 19 related skill hours

-Related cognate in Natural Sciences - 8 quarter hours

8. Outdoor Education Course Titles and Descriptions:

Introduction to Outdoor Recreation/Education: A broad view of Outdoor Recreation/Education that focuses upon the type of experiences and opportunities available to students interested in this track of recreation. The course will explore four general areas that the outdoor student might focus upon as he/she pursues his/her professional career. Areas of study will include: Educational Opportunities, Commercial Opportunities, Management Opportunities and Outdoor Specialist Opportunities.

Outdoor Education I: A practical Orientation to Outdoor Education and Outdoor Recreation to be held at the Warren Center, Blue Hills, Middlesex Falls and other areas. Course emphasis will center on two areas of study: 1) Basic animal and plant life in woodland and pond areas, and 2) techniques of reading the woods and utilizing natural materials.

Outdoor Education II: The course will explore outdoor education as it applies to schools, camps and environmental center curriculums. Students will develop techniques for writing and teaching lessons as well as prepare a unit plan that relates outdoor education to elementary school curriculums. In addition students will visit and observe outdoor education programs in the Boston area.

School Camping: The course will investigate outdoor education as it applies to school camp organization, administration, program planning and educational significance. As

part of the course each student will be required to participate in a one week supervised practical experience at a designated school camp.

Camp Administration: The course will investigate camp management guidelines including: site development, health and safety, hiring and staff training, public relations, national ACA standards, legal regulations, organization within camps, programs and other selected administrative aspects of operation.

Seminar on Issues and Legislation in Outdoor Recreation/Education: This course will investigate non-fiction writing, public relation methods and media agencies that have had an impact on recent issues in Outdoor Recreation/Education. The course will relate each of these areas to federal and state legislation implemented within the past 10 years. Course will include discussion and exposure to procedures for proposing legislation, lobbying and political pressure techniques.

Elements of Outdoor Recreation Planning: This course is designed to investigate two areas, 1) the phenomena of Outdoor Recreation, including its nature, significance, scope, and trends and 2) planning concepts (design), policy formation, administration, management and maintenance. The course will focus on camps, park areas, including state and federal lands, and other outdoor areas and facilities.

School Camping: An independent study of the nature and conduct of outdoor recreation education as implemented in

school camping programs. Problems investigated and methods developed under supervision of the faculty adviser and staff.

Administration of Resident Camp Programs: An in-depth study of staffing, sanitation and health; purchasing and storage of food, materials, equipment, and supplies; kitchen management; insurance, construction, and maintenance of buildings and program areas as they affect resident camping programs. A study of nationwide goals and trends in the camping movement is included.

9. Total Number of Students Graduated to Date in Outdoor Education Program(s):

209 B. S. - Education (Concentration in Outdoor Recreation/
Education)
25 Concentration in Outdoor Recreation/Education
25 M. S. - Education (Concentration in Recreation)
5 Minor in Outdoor Recreation/Education

10. Approximate Number of Total Students in Various Degree Programs and Percentage of Those Students in Outdoor Education Program(s):

375 B. S. - Education
60 B. S. - Education (Concentration in Outdoor Recreation/
Education)
16% % of Student Enrollment in Outdoor Education Program(s)

11. Future Developments:

The Department of Recreation Education is involved with developing outdoor education programs with public schools in the Boston area. These programs provide facilities for practical laboratory experiences and Field Work placements for students participating in the Outdoor Recreation/Education track.

12. Describe any field campus or Environmental Education center used in your program(s):

The university owns the Warren Center, a laboratory facility for Health, Physical Education and Recreation majors. The facility is also used as a conference center. It is located 29 miles from the University in Ashland, Massachusetts.

UNIVERSITY OF MASSACHUSETTS AT AMHERST

1. Name of Contact Person, Title, Location, Mailing Address and

Phone:

Dr. William E. Randall

Professor, Leisure Studies & Resources

Department of Landscape, Architecture & Regional Planning

Curry Hicks Building

University of Massachusetts

Amherst, Massachusetts 01003

2. Administrative Location:

College of Food & Natural Resources

3. Degree(s) Offered in Outdoor Education:

B. S. - Leisure Studies & Resources (Concentration in Environmental Interpretation)

4. Total Number of Faculty, Full-time and Part-time:

Full-time: 6

Part-time 2

5. Faculty Status and Education of Outdoor Education Faculty,

Full-time and Part-time:

Full-time:

Randall, William E., Professor

B. S.-University of Massachusetts (Nature Recreation)

M. S. and Ph. D.-University of Wisconsin (Plant Ecology)

6. Date Department Founded and Date Degree Program(s) Founded in

Outdoor Education:

1900 - Department of Landscape Architecture & Regional Planning

1937 - Nature Recreation

1976 - B. S. - Leisure Studies & Resources (Concentration in Environmental Interpretation) --Formerly called Nature Recreation

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

-B. S. - Leisure Studies & Resources - 121 semester hours

-Concentration in Environmental Interpretation - 21 semester hours plus 18 hours related cognate.

-Related cognate in American History, Archaeology, Natural History, or Natural Resources - 18 semester hours

8. Outdoor Education Course Titles and Descriptions:

Introduction to Environmental Interpretation: Principles and practices in interpretation for public appreciation of natural, archaeological and historical features in parks, museums and similar settings. Field trips.

Environmental Interpretation: Methods, techniques and resources in planning, design and delivery of interpretive services. Field trips.

Internship: Professional field experience with one or more approved cooperating leisure service agencies appropriate to the students' career choice. Full-time field placement throughout the semester.

9. Total Number of Students Graduated to Date in Outdoor Education Program(s):

200 B. S. - Leisure Studies & Resources (Concentration in Environmental Interpretation)

10. Approximate Number of Total Students in Various Degree Programs and Percentage of Those Students in Outdoor Education Program(s):

112 B. S. - Leisure Studies & Resources

-- B. S. - Leisure Studies & Resources (Concentration in Environmental Interpretation), with 40 graduating per year

-- Variable % of Student Enrollment in Outdoor Education Program(s)

11. Future Developments:

The concentration in Environmental Interpretation is now well-established, with a productive and distinguished history. Its latest thrust is to provide instruction about interpretation for those who will be responsible for interpretive services, but who will not be directly involved in them: e.g., park administrators, forest supervisors, conservation organization executives. By providing instruction for these students they are being diverted from the intensive "how-to" instruction designed for the prospective interpreters.

12. Describe any field campus or Environmental Education center used in your program(s):

There are so many excellent enterprises and facilities within

Massachusetts under public and private auspices with which we
cooperate that we feel such a center would be superfluous here.

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MICHIGAN STATE UNIVERSITY

Departments of Administration and Higher Education,
Curricula and Continuing Education

1. Name of Contact Person, Title, Location, Mailing Address and

Phone:

Dr. Roy K. Niemeyer

Professor

403 Ericksen Hall

Michigan State University

East Lansing, Michigan 48824

Phone: 517/353-7166

2. Administrative Location:

College of Education

3. Degree(s) Offered in Outdoor Education:

M. A. - Administration and Higher Education (Area of Emphasis
in Outdoor Education)

M. A. - Continuing Education (Area of Emphasis in Outdoor
Education)

M. A. - Curriculum (Area of Emphasis in Outdoor Education)

Ed. Specialist and Doctoral degrees also available

4. Total Number of Faculty, Full-time and Part-time:

Full-time: 0

Part-time: 10

5. Faculty Status and Education of Outdoor Education Faculty,

Full-time and Part-time:

Part-time:

Niemeyer, Roy K., Professor

B. S. and M. A.-Michigan State University (Health, Physical Education and Recreation)

Ph. D.-University of Southern California (Physical Education/ Education)

--Newman, Earl, Assistant Professor

B. S. and M. A.-Wayne State University (Education)

Ph. D.-University of Michigan (Education)

--Blackman, Charles, Professor

B. A.-Olivet (Social Science)

M. Ed.-Ohio State University (Secondary Education)

Ph. D.-Ohio State University (Secondary Education)

--Kleis, Russell J., Professor

M. S.-Michigan State University (Education)

--Moore, Samuel, Professor

B. A.-University of Miami (Physical Education)

M. A.-Harvard (Education)

Ph. D.-University of Oklahoma (Education Administration)

--Brehm, Shirley A., Professor

B. A.-Michigan State University (Elementary Education/Science)

M. A.-Michigan State University (Education and Conservation Education)

Ph. D.-Michigan State University (Curriculum & Science Education)

--Cheney, Bruce, Professor

B. S.-Iowa State (Vocational Education)

M. S.-University of Wisconsin (Education)

Ed. D.-University of Illinois (Education)

--Gardner, Richard, Associate Professor

B. S.-Eastern Oregon College (Education)

M. S.-Oregon College of Education (Vocational Education)

Ed. D.-Oregon State (Vocational Education)

--Hickey, Howard, Associate Professor

B. A.-Western Washington State College (General Math, Social Studies)

Ed. M.-Western Washington State College (Supervision, Curriculum)

M. A.-Bowdoin College (Mathematics)

Ph. D.-University of Washington (Educational Administration)

--Riethmiller, Peggy, Professor

Ph. D.-Michigan State University (Education)

--Bristol, James, Associate Professor

B. S.-Waynesburg College (Biology)

M. A.-West Virginia University (Recreation)

Re. D.-Indiana University (Recreation-Government)

6. Date Department Founded and Date Degree Program(s) Founded in
Outdoor Education:

Continuing Education, Higher Education, Curriculum and Elementary Education programs emphasizing Outdoor Education probably started in 1953. M. A. with emphasis in Outdoor Education and Ph. D.

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

-M. A. - Administration and Higher Education - 45 credit hours - multidisciplinary

-M. A. - Continuing Education - 45 credit hours - multidisciplinary

-M. A. - Curriculum - 45 credit hours - multidisciplinary

8. Outdoor Education Course Titles and Descriptions:

Outdoor Education: Teachers and others interested in instructional programs involving use of outdoor settings, school camps. History, philosophical basis, implications for the curriculum. Field trips and observations arranged.

Workshop: A laboratory approach to problems in the various areas of education. The workshop makes it possible for the participants to devote a period of time in a concentrated effort to find solutions to common problems.

Workshops in Education: Laboratory approach which provides opportunities for experienced educational personnel to concentrate their study on common administrative and supervisory problems.

Seminars in Outdoor Education: Seminars in the various fields of emphasis.

Independent Study in Outdoor Education: Study on an individual or group basis in the various fields of emphasis.

Methods Teaching Astronomy: Develops an understanding of the basic principles and techniques of effective instruction in the various subject matter areas in the school curriculum. Students will be expected to investigate research as it relates to the improvement of instruction in a special field of study.

New Curriculum: Environmental Education: In-depth examination of the objectives, learning theory, instructional strategies, classroom activities, and science content of a single elementary science program selected from among such curriculum revision projects.

9. Total Number of Students Graduated to Date in Outdoor Education Program(s):

Figures are difficult to accumulate: several hundred have gone through the Master's program and at least 12 have received Ph. D's.

10. Approximate Number of Total Students in Various Degree Programs and Percentage of Those Students in Outdoor Education Program(s):

Administration and Higher Education - M. S. - 214, Ph. D's - 225

Curriculum - M. S. - 247, Ph. D's - 179

Counseling - M. S. - 219, Ph. D's - 168

Percentages of Students in Outdoor Education are not available at this time.

11. Future Developments:

Michigan State University, College of Education, views Outdoor Education as being interdisciplinary and cutting across all subject matter areas. Presently, several major areas within the College include outdoor education as an area of emphasis. Course work and related experiences are interwoven in the outdoor education emphasis. This pattern of operation should continue and even better cooperation between disciplines is forthcoming.

12. Describe any field campus or Environmental Education center used in your program(s):

Michigan State University does not have a field campus of its own. However, since the Outdoor Education Project was housed here and hundreds of workshops have been conducted over the years, both in Michigan and throughout the United States, many different sites have been utilized for educational purposes including Higgins Lake Conservation School, Gull Lake Biological Station and St. Mary's Lake Camp in Michigan.

MICHIGAN STATE UNIVERSITY

Department of Elementary and Special Education

1. Name of Contact Person, Title, Location, Mailing Address and

Phone:

Dr. Shirley A. Brehm

Professor

or

Dr. Bruce D. Cheney

Professor

Department of Elementary and Special Education

Erickson Hall

Michigan State University

East Lansing, Michigan 48824

Phone: 517/353-0695

2. Administrative Location

College of Education

Department of Elementary and Special Education

3. Degree(s) Offered in Outdoor Education:

M. A. - Elementary Education (Concentration in Environmental/
Outdoor Education)

4. Total Number of Faculty, Full-time and Part-time:

Full-time 0

Part-time 2

5. Faculty Status and Education of Outdoor Education Faculty,

Full-time and Part-time:

Part-time:

Brehm, Shirley A., Professor

B. A.-Michigan State University (Elementary Education - Science)

M. A.-Michigan State University (Education & Conservation
Education)

Ph. D.-Michigan State University (Curriculum and Science
Education)

--Cheney, Bruce D., Professor

B. S.-Iowa State University (Forestry)

M. S.-University of Wisconsin (Science Education)

Certification for supervisors, University of Northern Iowa

Ed. D.-University of Illinois (Science Education)

6. Date Department Founded and Date Degree Program(s) Founded in

Outdoor Education:

1961 - Elementary & Special Education

1974 - M. A. - Elementary Education (Emphasis in Environmental/
Outdoor Education)

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

-M. A. - Elementary Education - 45 term hours

-Concentration in Environmental/Outdoor Education - 12 term
hours

-Related cognate in Natural Science, Social Science, Resource
Development, Fisheries & Wildlife, Communications - 21 term hours

8. Outdoor Education Course Titles and Descriptions:

Seminar Environmental Programs, Elementary & Junior

High School: Examines current curricula for environmental correlations, focuses on developing environmental education curricula which can be integrated into on-going programs.

Practicum and Field Experience: Individually developed practical experiences with schools and camps in environmental/outdoor education.

Seminar - Science and Social Studies Contributions to Environmental Education: Integration of contributions of two subject areas in selected environmental problem areas, e.g. energy, population, food supply.

Seminar - Outdoor Education: An overview of on-going outdoor education programs within the state and the nation.

9. Total Number of Students Graduated to Date in Outdoor Education Program(s):

15 M. A. - Elementary Education (Concentration in Environmental/Outdoor Education)

10. Approximate Number of Total Students in Various Degree Programs and Percentage of Those Students in Outdoor Education Program(s):

2000 M. A. - Elementary Education

80 M. A. - Elementary Education (Concentration in Environmental/Outdoor Education)

4% % of Student Enrollment in Outdoor Education Program(s)

11. Future Developments:

Continued cooperation with other departments is anticipated.

12. Describe any field campus or Environmental Education center used in your program(s):

MICHIGAN STATE UNIVERSITY

Department of Fisheries and Wildlife

1. Name of Contact Person, Title, Location, Mailing Address and

Phone:

Dr. Robert W. George

Associate Professor

Department of Fisheries and Wildlife

Michigan State University

East Lansing, Michigan 48824

Phone: 517/355-4477

2. Administrative Location:

College of Agriculture and Natural Resources, Department of
Fisheries and Wildlife

3. Degree(s) Offered in Outdoor Education:

B. S. - Fisheries and Wildlife (Natural History Option)

M. S. - Fisheries and Wildlife (Environmental Conservation)

Ph. D. - Fisheries and Wildlife (Environmental Conservation)

4. Total Number of Faculty, Full-time and Part-time:

Full-time: 4

5. Faculty Status and Education of Outdoor Education Faculty,

Full-time and Part-time:

Full-time:

George, Robert W. - Associate Professor

B. S.-Michigan State University (Soil Science)

M. S.-Michigan State University (Soil Science)

Ph. D.-Michigan State University (Fisheries and Wildlife)

--Mouser, Gilbert W. - Associate Professor

B. S.-Greenville College (Biology)

Ph. D.-Cornell University (Field Biology)

--Hinkle, Robert - Instructor

B. S.-Michigan State University (Fisheries and Wildlife)

M. S.-Michigan State University (Fisheries and Wildlife)

Ph. D.-Michigan State University (Fisheries and Wildlife)

--Johnson, David L. - Instructor

B. S.-Taylor University (Biology)

M. S.-Michigan State University (Zoology)

6. Date Department Founded and Date Degree Program(s) Founded in
Outdoor Education:

1950 - Department of Fisheries and Wildlife

1960 - Conservation Education

1976 - Natural History Option

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

-B. S. - Fisheries and Wildlife - 180 term hours

-University Requirements - 33 term hours

-College Requirements - 21 term hours

-Major Requirements - 100 term hours

-Electives - 26 term hours

8. Outdoor Education Course Titles and Descriptions:

Environmental Interpretation I: Principles: Philosophy, needs, types, and uses of information services in private, municipal, county, state and federal park and recreation areas. The role of the park interpreter (naturalist).

Environmental Interpretation II: Methods and Devices: Methodology and equipment used in information transmission in natural, historic, and scenic areas. Site selection and development criteria for natural resource interpretation.

Environmental Conservation Education: Nature, distribution and interrelationships of natural resources dictating the quality of man's environment. Principles of resource use, study of natural objects and techniques of teaching in and about the environment.

Outdoor Environmental Education: Using the outdoors as a teaching laboratory for ecological studies of plant and animal communities. Designed primarily for secondary teachers.

Environmental Conservation Program Design: Materials and methods for integrating environmental conservation into educational programs in schools, nature centers, youth groups and communities.

Field Techniques for Environmental Conservation Education: To develop practical field skills in teachers, naturalists, and field biologists, a heavy emphasis on field studies with a minimum of lecture nature will be presented. Techniques in photography, land navigation, and community studies will be emphasized.

9. Total Number of Students Graduated to Date in Outdoor Education Program(s):

150

10. Approximate Number of Total Students in Various Degree Programs and Percentage of Those Students in Outdoor Education Program(s):

140 Fisheries

240 Wildlife

20 Natural History

120 Natural Resources and Environmental Education

11. Future Developments:

Since more than adequate opportunities in graduate work exist on campus, the primary improvements envisioned will be to constantly improve the undergraduate curriculum. Providing planned practical experiences to develop the teaching and outdoor skills of the students through a credit intern program will be provided on location throughout the United States.

A new laboratory sequence to develop skills applicable to the classroom is being contemplated. An intensive seminar program will provide opportunities for student specialization.

12. Describe any field campus or Environmental Education center used in your program(s):

Kellogg Biological Station is a 1447 acre site located on Gull Lake about 40 miles from campus. The station provides an intensive field experience in the biological and environmental

sciences. The Kellogg Bird Sanctuary location on the station offers day camping experiences for elementary students which is operated by environmental education specialists enrolled at the station. Several off-campus projects and courses are offered which can provide a diversity of experiences for interested students. Also the Natural Resources and Environmental Education Club provides at cost resource people to work on a daily basis with school camping programs. Internships are available at Outdoor Education Centers within the state to provide a more intensive experience.

NICHIGAN STATE UNIVERSITY

Department of Fisheries and Wildlife

1. Name of Contact Person, Title, Location, Mailing Address and

Phone:

David I. Johnson

Coordinator, Natural Resources and Environmental Education

Department of Fisheries and Wildlife

Michigan State University

East Lansing, Michigan 48824

Phone: 517/355-4477

2. Administrative Location:

College of Agriculture and Natural Resources, Departments of
Fisheries and Wildlife, Forestry, Parks and Recreation Resources,
and Resources Development.

3. Degree(s) Offered in Outdoor Education:

B. S. - Natural Resources and Environmental Education

4. Total Number of Faculty, Full-time and Part-time:

All faculty are appointed in four academic departments within
Natural Resources described under administrative location.

5. Faculty Status and Education of Outdoor Education Faculty,

Full-time and Part-time:

See above.

6. Date Department Founded and Date Degree Program(s) Founded in

Outdoor Education:

1972 - Major initiated

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

-University Requirements - 33 term hours

-College Requirements - 32 term hours

-Natural Resources and Environmental Education Requirements -
54 term hours

-Minor Requirements - 36 term hours

-Electives - 21 term hours

8. Outdoor Education Course Titles and Descriptions:

Resource Ecology and Man: Mechanisms by which the environment regulates man and his resources. Ecology as the unifying basis for resource management. Resource conservation policy and environmental quality.

Introduction for Environmental Systems: Basic systems concepts presented in non-mathematical manner. Application to selected ecological topics, e.g., energy, water quality, food production, population dynamics. Interactive models provide opportunity for students to play decision-making roles.

The Politics of Ecology: Political considerations fundamental to environmental issues. Theory, practice, and prescriptions for action are included. Economic, legal, and ethical factors influencing public policy decisions will be emphasized.

Wilderness Survival: Outdoor skills for utilization of

plant and animal materials to provide shelter, fire, signals, water and food in the outdoors. Psychology and attitudes conducive to wilderness survival and appreciation. Field trips required.

Environmental Attitudes and Concepts: Beliefs and attitudes toward land, primitive man and ancient civilizations. Effects of Muir, Thoreau, and others on man/land relationship. Industrialism and environmental controversy. Field trip required.

Environmental Interpretation I: Principles: Philosophy, needs, types, and uses of information services in private, municipal, county, state and federal park and recreation areas. The role of the park interpreter (naturalist).

Environmental Conservation Education: Nature, distribution and interrelationships of natural resources dictating the quality of man's environment. Principles of resource use, study of natural objects and techniques of teaching in and about the environment.

Environmental Interpretation II: Methods and Devices: Methodology and equipment used in information transmission in natural, historic, and scenic areas. Site selection and development criteria for natural resource interpretation.

Outdoor Environmental Education: Using the outdoors as a teaching laboratory for ecological studies of plant and animal communities. Designed primarily for secondary teachers.

Environmental Conservation Program Design: Materials and

methods for integrating environmental conservation into education programs in schools, nature centers, youth groups and communities.

Field Techniques for Environmental Conservation Education:

To develop practical skills in teachers, naturalists, and field biologists, a heavy emphasis on field studies with a minimum of lecture material will be presented. Techniques in photography, land navigation and community studies will be emphasized.

9. Total Number of Students Graduated to Date in Outdoor Education Program(s):

120 B. S. - Natural Resources and Environmental Education

10. Approximate Number of Total Students in Various Degree Programs and Percentage of Those Students in Outdoor Education Program(s):

119 Fisheries and Wildlife

113 Forestry

24 Parks and Recreation Resources

24 Resource Development

11. Future Developments:

Since more than adequate opportunities in graduate work exist on campus, the primary improvements envisioned will be to constantly improve the undergraduate curriculum. Providing planned practical experiences to develop the teaching and outdoor skills of the students through a credit intern program will be provided

on location throughout the United States. A new laboratory sequence to develop skills applicable to the classroom is being contemplated. An intensive seminar program will provide opportunities for student specialization.

12. Describe any field campus or Environmental Education center used in your program(s):

Kellogg Biological Station is a 1447 acre site located on Gull Lake about 40 miles from campus. The station provides an intensive field experience in the biological and environmental sciences. The Kellogg Bird Sanctuary location on the station offers day camping experiences for elementary students which is operated by environmental education specialists enrolled at the station. Several off-campus projects and courses are offered which can provide a diversity of experiences for interested students. Also, the Natural Resources and Environmental Education Club provides at cost resource people to work on a daily basis with school camping programs. Internships are available at Outdoor Education Centers within the state to provide a more intensive experience.

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MICHIGAN STATE UNIVERSITY

Department of Park and Recreation Resources

1. Name of Contact Person, Title, Location, Mailing Address and

Phone:)

Louis F. Twardzik

Professor and Chairman

or

Dr. Paul H. Risk

Assistant Professor and Coordinator

Department of Park and Recreation Resources

131 Natural Resources

Michigan State University

East Lansing, Michigan 48824

Phone: 517/353-5190

2. Administrative Location:

Department of Park and Recreation Resources

College of Agriculture and Natural Resources

3. Degree(s) Offered in Outdoor Education:

B. S. - Park and Recreation Resources (Emphasis in Environmental Interpretation)

M. S. - Park and Recreation Resources (Emphasis in Environmental Interpretation)

4. Total Number of Faculty, Full-time and Part-time:

Full-time: 10

Part-time: 3

5. Faculty Status and Education of Outdoor Education Faculty,

Full-time and Part-time:

Full-time:

Risk, Paul H., Assistant Professor

A. B.-California State University/Los Angeles (Botany)

M. S.-University of California/Davis (Entomology)

Ph. D.-Michigan State University (Fisheries and Wildlife)

Part-time:

Bigford, Paul, Instructor

B. S.-University of Michigan (Fisheries and Wildlife)

M. S.-Michigan State University (Parks and Recreation)

--Gank, Richard, Lab Technician

B. S.-Michigan State University (Parks and Recreation)

M. S.-Michigan State University (Resource Development)

6. Date Department Founded and Date Degree Program(s) Founded in
Outdoor Education:

1959-1969 - Department of Resource Development (Park Management
Curriculum)

1969 - Department of Park and Recreation Resources

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

-B. S. - Park and Recreation Resources (Emphasis in Environ-
mental Interpretation) - 180 credits

Interpretive Courses - 10-15 credits

Chemistry - 11 credits

Natural Sciences - 41-44 credits

Communication - 10 credits

M. S. - Park and Recreation Resources (Emphasis in Environmental Interpretation)

Thesis - 45 credits

Non-thesis - 55 credits

8. Outdoor Education Course Titles and Descriptions:

Wilderness Survival: Outdoor skills for utilization of plant and animal materials to provide shelter, fire, signals, water and food in the outdoors. Psychology and attitudes conducive to wilderness survival appreciation. Field trip required.

TV: A television lecture course dealing with the principles and attitudes necessary to promote survival in a wilderness setting.

Environmental Attitudes and Concepts: Beliefs and attitudes toward land by primitive man and ancient civilizations. Effects of Muir, Thoreau, and others on man/land relationships. Industrialism and environmental quality. Emphasis is on wilderness areas.

Environmental Interpretation I: Principles: Philosophy, needs, types, and use of information services in private municipal, county, state and federal park and recreation areas. The role of the park interpreter.

Environmental Interpretation II: Methods: Methodology
and equipment used in information transmission in natural,
historic, and scenic areas. Site selection and development
criteria for natural resource interpretation. Course is project
and participation oriented.

9. Total Number of Students Graduated to Date in Outdoor Education
Program(s):

60 B. S. - Park and Recreation Resources (Emphasis in
Environmental Interpretation)

19 M. S. - Park and Recreation Resources (Emphasis in
Environmental Interpretation)

10. Approximate Number of Total Students in Various Degree Programs
and Percentage of Those Students in Outdoor Education Program(s):

225 B. S. - Park and Recreation Resources

58 B. S. - Park and Recreation Resources (Emphasis in
Environmental Interpretation)

25.8% % of Student Enrollment in Outdoor Education Program(s)

11. Future Developments:

Plans are currently being laid for expansion of the graduate
program in Interpretation to permit greater depth and breadth.

The result should be greater variety in course offerings and
enlarged involvement of students in ongoing interpretive
activities both on and away from the University campus. At
the undergraduate level as well, historical interpretation

will play an increasingly important part in the curriculum through cooperative arrangements with other sections of the University community.

Conceptualization of a functioning nature center, which we hope will soon be added to the operations of the department, is under way enabling students to present programs and have greater public contact as part of their educational experience.

The current Wilderness Survival Laboratory will be expanded and will then include interpretive projects as well.

12. Describe any field campus or Environmental Education center used in your program(s):

Within 11 miles of the campus is a 5500 acre Wildlife Research Site on which students present Environmental Interpretive programs and participate in wilderness survival experiences.

THE UNIVERSITY OF MICHIGAN

1. Name of Contact Person, Title, Location, Mailing Address and Phone:

Dr. William B. Stapp

Program Chairman

Environmental Education and Outdoor Recreation

University of Michigan

Ann Arbor, Michigan 48109

Phone: 313/764-1410

2. Administrative Location:

School of Natural Resources

3. Degree(s) Offered in Outdoor Education:

M.S. - Natural Resources (Concentration in Environmental Education)

4. Total Number of Faculty, Full-time and Part-time:

Full-time: 4

Part-time: 0

5. Faculty Status and Education of Outdoor Education Faculty, Full-time and Part-time:

Full-time:

Stapp, William B. - Program Chairman

B.A. - University of Michigan (Education)

M.A. - University of Michigan (Biology)

Ph.D. - University of Michigan (Conservation)

--Nowak, Paul F. - Associate Professor

Ph.D. - University of Michigan (Conservation)

--Bryant, Bunyan

M.S.W. - University of Michigan (Social Work)

Ph.D. - University of Michigan (Education)

--Crowfoot, James E. - Associate Professor

B.S. - University of Michigan (Physics)

B.S. - University of Michigan (Theology)

M.A. - University of Michigan (Psychology)

6. Date Department Founded and Date Degree Program(s) Founded in Outdoor

Education:

1971 - M.S. - Natural Resources (Concentration in Environmental Education)

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

M.S. - 24 credit hours of courses and work-study plus 6 credit hours of thesis

M.S. - 36 credit hours of courses and work-study

8. Outdoor Education Course Titles and Descriptions:

Mass Media and the Environment: This course analyzes the environmental content of the mass media, in terms of its origins in media structure and processes, and its impact on audience behavior. Through readings, discussions, and examinations, students will evaluate the media as tools of mass environmental education, and suggest ways of improving media performance.

Writing about Environment: Discussion of and practice in the skills of writing about the environment for nonscientific audiences:

press releases, pamphlets, magazine articles, etc. Includes analysis of the performance of contemporary environmental writers.

Community Environmental Field Studies: A course designed to study under field conditions certain environmental issues that are common to most community environments, such as land utilization, recreation, air and water pollution, transportation, housing, and environmental planning. Each issue will be examined from an ecological, economic, political, social and technological point of view. One hour of classwork is scheduled in connection with each field trip in preparation for and analysis of the experience.

Environmental Education Seminar: To provide a conceptual and philosophical understanding of the emerging field of environmental education with special emphasis on the following: the role of the teacher in creating a learning environment, values and teaching, attitude formation and change, handling controversial issues, principles of curriculum development, available instructional aids and techniques in utilizing them, school site planning and utilization, and strategy for developing and implementing environmental education programs.

Planned Social Change and Environmental Problems: Emphasis is on concepts for understanding social system change, major strategic perspectives on planned social change in the United States, and problems in planned change. Approaches to planned change are related to environmental problems as an aspect of a complex of interrelated social problems. Tactical issues are introduced. Case studies are used for explanatory purposes and for application of learnings.

Training in Change Skills: Training in behavioral skills for participation in interest-group-oriented planned change. The skills include: building and maintaining a change group; effective use of intergroup dynamics; conceptualization of change models; and individual value clarification, risk-taking assessment, and skill evaluation.

Seminar in Environmental Education Instructional Programs: A seminar on current topics relating to environmental education instructional programs, such as: emerging philosophies; conceptualizing, designing, implementing, and evaluating programs; constraints to program implementation; and current research findings. A course designed primarily for advanced graduate students focusing their training on environmental education instructional programs.

Environmental Education and the Concept of Values: This core seminar for all environmental education graduate students explores the concepts of values and value change in the context of environmental instruction, communication, and advocacy.

Dynamics of Interest Group Change: The dynamics of professional and political dilemmas, power and conflict utilization, diagnosis and change agency accountability, small group dynamics and change-agent-roles and maintenance functions and the critique and analysis of several social and environmental change models. Students are expected to engage in small group discussion, micro role plays and simulation exercises, and the critique and presentation of oral and written reports.

Mass Media and the Environment: This course analyzes the environmental content of the mass media, in terms of its origins in media

structure and processes, and its impact on audience behavior. Through readings, discussions, and independent empirical research, students will evaluate the media as tools of mass environmental education, and suggest ways of improving media performance.

9. Total Number of Students Graduated to Date in Outdoor Education Program(s):

15 M.S. - Natural Resources (Concentration in Environmental Education)

10. Approximate Number of Total Students in Various Degree Programs and Percentage of Those Students in Outdoor Education Program(s):

35 M.S. - Natural Resources (Concentration in Environmental Education)

11. Future Developments:

To continue to build an Environmental Education Program which prepares students to serve society in the area of environmental instruction, environmental advocacy, and environmental communications. Plans are to add additional faculty in the future to provide an even higher quality Environmental Education Program.

12. Describe any field campus or Environmental Education center used in your program(s):

Field work is primarily the community environment. The University of Michigan does not have a field campus.

BEMIDJI STATE UNIVERSITY

1. Name of Contact Person, Title, Location, Mailing Address and Phone:

Dr. Ray Nelson

Director of Center for Environmental - Outdoor Education

Division of Health, Physical Education and Recreation

Bemidji State University

Bemidji, Minnesota 56601

Phone: 218/755-2850

2. Administrative Location:

Center for Environmental - Outdoor Education

Deputy Hall

3. Degree(s) Offered in Outdoor Education:

Communications Media Major (Emphasis in Environmental Interpretation)

Environmental - Outdoor Education Concentration for Elementary
Education Majors

Environmental Studies Major

4. Total Number of Faculty, Full-time and Part-time:

Full-time: 6

5. Faculty Status and Education of Outdoor Education Faculty, Full-time
and Part-time:

Full-time:

Nelson, Ray - Director, Center for Environmental - Outdoor Education

B.S. - University of Wisconsin, Broadfield Social Studies and Physical

Education

165

177

Ed.D. - Utah State University (Curriculum and Supervision)

--Fuchsman, Charles - Associate Professor of Environmental Studies;

Director of Center for Environmental Studies

B.S. - College of the City of New York

Ph.D. - Western Reserve University

--Yahraes, Thomas - Director of Bald Eagle Outdoor Learning Center;

Assistant Professor Environmental - Outdoor Education, Bemidji

State University

B.A. - Glassboro State College

M.S. - Southern Illinois University

--Varberg, Mimi - Program Coordinator, Bald Eagle Outdoor Learning Center

--Maron, Bonnie

--Hollinghead, Bert

6. Date Department Founded and Date Degree Program(s) Founded in Outdoor Education:

1972 - Department founded

1975/76 - Communications Media with Environmental Interpretation

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

Communications Media with Environmental Interpretation - 67 hours

Outdoor Education (Concentration in Elementary Education) - 24 hours
in Concentration

Environmental Studies Major - 110 hours

8. Outdoor Education Course Titles and Descriptions:

Introduction to Outdoor Education: Objectives, program ideas, methods and materials of outdoor education. General and specific

Organization and Administration of Outdoor Education: The initiation and administration of outdoor education experiences in varying lengths, and the acquisition, development, and maintenance of outdoor education facilities and programs. Prerequisite: Introduction to Outdoor Education.

Field Experiences in Outdoor Education: An interdisciplinary field oriented course designed to provide the student with the basic scientific knowledge of the natural environment and its relationship to the total school curriculum. Students will be acquainted with the local flora and fauna in their natural habitats wherever possible. The course is not intended for Biology majors and minors.

Independent Study:

Internship:

Workshops, Institutes, Tours:

Special Purpose Instruction:

9. Total Number of Students Graduated to Date in Outdoor Education Program(s):

10. Approximate Number of Total Students in Various Degree Programs and Percentage of Those Students in Outdoor Education Program(s):

11. Future Developments:

Wilderness Leadership Certifications, Outdoor Education and Recreation Major

12. Describe any field campus or Environmental Education center used in
your program(s):

Bald Eagle Outdoor Learning Center in Chippewa National Forest, credit
serving and public experience serving.

CENTRAL MISSOURI STATE UNIVERSITY

1. Name of Contact Person, Title, Location, Mailing Address and Phone:
Mr. Colston Pitt
Assistant Professor of Recreation
Department of Recreation
Central Missouri State University
Warrensburg, Missouri 64093
Phone: 816/429/4055
2. Administrative Location:
School of Education
3. Degree(s) Offered in Outdoor Education:
B.S. - Recreation (Concentration in Outdoor Education)
M.S. - Recreation and Leisure Services (Outdoor Education Option)
4. Total Number of Faculty, Full-time and Part-time:
Full-time: 3
Part-time: 0
5. Faculty Status and Education of Outdoor Education Faculty, Full-time and Part-time:
Full-time:
Beaver, Lyle - Head of the Department of Recreation and Professor of Recreation
B.A. - Luther College
B.A. - Colorado State College

- D.Rec. - Indiana University
- Pitt, Colston - Assistant Professor of Recreation
- B.A. - Marshall University
- M.S. - Marshall University
- Simmons, Terry - Assistant Professor of Recreation
- B.S. - North East Missouri State University
- M.A. - University of Wyoming
- Ph.D. - University of Utah

6. Date Department Founded and Date Degree Program(s) Founded in Outdoor Education:

- 1965 - Department of Recreation founded Fall
- 1965 - B.S. - Recreation (Concentration in Outdoor Education)
- 1976 - M.S. - Recreation and Leisure Services (Outdoor Education Option)

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

- B.S. - Recreation - 12 1/2 semester hours
- Concentration in Outdoor Education - 28-30 semester hours
- M.S. - Recreation and Leisure Services - Minimum 32 semester hours
- Outdoor Education Option - 9-11 semester hours

8. Outdoor Education Course Titles and Descriptions:

Undergraduate:

Camp Leadership: Camping movement and objectives. Emphasis on campcraft skills and application. Includes a four-day campout. A.C.A. certification possible.

School Camping: History, philosophy, development, and factors which influence outdoor education and school camping. Emphasis is on the leadership role of counselors in camp program.

Foundations for Outdoor Education: Acquaints teachers with the meaning, scope, and values of outdoor education. Procedures and instructional material especially suited for teaching in the out-of-doors will be emphasized. Existing programs and trends in outdoor education will be examined.

Youth Serving Organizations: Nature and development and purposes of the various national and city youth serving organizations.

Introduction to Park Management: Introductory course in the study of park systems and of problems common to the acquisition, operation, and maintenance of public park areas and facilities.

Senior Seminar in Recreation: Designed to aid the student in specialized areas of concern with emphasis on personal needs and competencies.

Practicum in Recreation: Practical experiences leading to understanding and appreciation for the work and function of various agencies offering recreation services. Students will be placed in a setting according to the student's needs.

Professional Field Experiences I: Experience in recreation leadership and services working in an approved recreation department under qualified and experienced leaders.

Professional Field Experiences II: Experience in recreation leadership and services working in an approved recreation department under qualified and experienced leaders.

Graduate:

Seminar in Leisure Resources: An overview and critical analysis of literature and research in the field of recreation and leisure.

Issues will be selected from those not covered in theory and practicum courses.

Camp Administration: Designed to introduce students to the field of camp administration and to aid members of camp boards, camp leaders, and others involved with camp and outdoor-related programs, to better understand the problems and responsibilities facing the administrative staff in such settings.

Institute in Recreation: Designed to provide students with specific information on current problems related to outdoor education. Specific on-site locations will be visited, compared, and analyzed.

Research: Special investigation of an approved problem in the area of recreation. The problem will relate to the student's selected emphasis.

Internship in Recreation: A ten week practical and supervised experience in an agency that offers a service in the student's selected emphasis in recreation. Weekly and final written reports are required.

9. Total Number of Students Graduated to Date in Outdoor Education

Program(s):

20 B.S. - Recreation (Concentration in Outdoor Education)

0 M.S. - Recreation and Leisure Services (Outdoor Education Option)

10. Approximate Number of Total Students in Various Degree Programs and

Percentage of Those Students in Outdoor Education Program(s):

150 B.S. - Recreation

15 B.S. - Recreation (Concentration in Outdoor Education)

10% % of student enrollment in Outdoor Education Program(s)

- 15 H.S. - Recreation and Leisure Services
- 5 H.S. - Recreation and Leisure Services (Outdoor Education Option)
- 33% % of student enrollment in Outdoor Education Program(s)

11. Future Developments:

Central Missouri State University is in a consolidating process. They have added a new staff position and started the Master of Science in Recreation and Leisure Services program this year. The major thrust of the department for the immediate future will be to upgrade and solidify all existing programs; this is in keeping with the department's philosophy of a quality program to produce quality professionals in the field of recreation and recreation services.

12. Describe any field campus or Environmental Education center used in your program(s):

Central Missouri State University owns and maintains Pertle Springs, a 300 acre recreation and biological research area one mile south of the main campus. Pertle Springs has 3 lakes and various forest and meadow type settings. Pertle Springs, along with the department's mobile research unit, supplies numerous practical experiences for the outdoor education student at Central Missouri State University.

UNIVERSITY OF NEBRASKA AT OMAHA

1. Name of Contact Person, Title, Location, Mailing Address and Phone:

Dr. Harold J. Nolan, Jr.

Assistant Professor of Recreation/Leisure Studies

Division of Recreation/Leisure Studies

School of Health, Physical Education and Recreation

University of Nebraska at Omaha

Omaha, Nebraska 68101

2. Administrative Location:

School of Health, Physical Education and Recreation

3. Degree(s) Offered in Outdoor Education:

B.S. - Recreation/Leisure Studies (Concentration in Outdoor Education and Recreation)

4. Total Number of Faculty, Full-time and Part-time:

Full-time: 2

Part-time: 1

5. Faculty Status and Education of Outdoor Education Faculty, Full-time and Part-time:

Full-time:

Nolan, Jr., Harold J., Assistant Professor

B.A. - John F. Kennedy College (Recreation Administration)

M.A. - Montclair State College (Outdoor Recreation and Environmental Management)

Ph.D. - University of Utah (Recreation/Park Planning and Resource Management)

6. Date Department Founded and Date Degree Program(s) Founded in Outdoor Education:

1962 - Division of Recreation/Leisure Studies

1974 - B.S. - Recreation/Leisure Studies (Concentration in Outdoor Education and Recreation)

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

B.S. - Recreation/Leisure Studies - 125 credit hours

Concentration in Outdoor Education and Recreation - 25-27 credit hours

Recreation Core Course Requirements - 28 credit hours

Related/Allied cognate - credit hours

8. Outdoor Education Course Titles and Descriptions:

Outdoor Education: An examination into the foundation of outdoor education and recreation experiences in and for the outdoors to provide the student with a working knowledge of program with the outdoors as a classroom setting.

Camp Counseling and Outdoor Education: Designed for men and women students to provide theoretical aspects of training in camping through class, lecture, and discussion sessions and to provide opportunities for actual training in the skills associated with camp life.

Winter Outdoor Education Workshop: A course to provide a foundation for the educational development of Winter Outdoor Education skills for full-time students, as well as teachers and recreational

professionals in the field. The concentration is on (a) Natural Resource Studies, (b) Environmental Management Skills, (c) Winter Teaching Skills, and (d) Outdoor Recreation Activities.

Outdoor Recreation Resource Planning: An in-depth view of outdoor recreation planning, policy formation, administration, and significant current problems. Specific attention will be focused on statewide planning, recreation variables, cultural preferences, demand, financing, decision-making, and public policy.

Problems in Recreation: To provide an opportunity for students to examine specific problems in outdoor education and to further professional improvement and growth.

Backpacking and Orienteering: To introduce students to the outdoor sports of backpacking and orienteering, with emphasis on equipment, leadership, safety, hypothermia, and trip planning. Outdoor outing participation is required.

Management and Maintenance of Recreation and Park Facilities: To examine the problems associated with the proper management and maintenance of Park and Recreation facilities. The course includes an introduction to management principles, low level technical information, and sources of management and maintenance information sources.

Beginning and Advanced Fieldwork: Practical experiences in the outdoor education field in public, private, or voluntary agencies.

9. Total Number of Students Graduated to Date in Outdoor Education

Program(s):

5 B.S. - Recreation/Leisure Studies (Concentration in Outdoor Education and Recreation)

176

188

10. Approximate Number of Total Students in Various Degree Programs and Percentages of Those Students in Outdoor Education Program(s):

130 B.S. - Recreation/Leisure Studies

13 B.S. - Recreation/Leisure Studies (Concentration in Outdoor Education and Recreation)-

10% % of student enrollment in Outdoor Education Program(s)

11. Future Developments:

The University of Nebraska at Omaha Division of Recreation/Leisure Services is in the process of revamping its outdoor education concentration. Strong relations are currently being developed with other departments within the University, local school districts, and other agencies within the region. A number of grants have been and continue to be written for additional staff, equipment, and a mobile nature center, and plans are in the works for a joint field campus with the Omaha area YMCA. The emphasis has been, and will continue to focus on community service by outdoor education and recreation faculty and students. This has already been displayed through weekend workshops and planning and development contributions for outdoor facilities and areas.

12. Describe any field campus or Environmental Education center used in your program(s):

The University currently has use of Camp Hitchcock, a 500 acre wooded area owned and operated by the YMCA. The camp is located in Crescent, Iowa, which is 18 miles northeast of Omaha. Plans are currently being initiated for joint funding and development of the resource by the University and the YMCA in order to provide a field campus and

learning lab for University students, as well as to increase the
outdoor education camp activities by local school groups.

ANTIOCH - NEW ENGLAND

1. Name of Contact Person, Title, Location, Mailing Address, and Phone:

Ty G. Minton

Coordinator of Environmental Studies Program

Antioch - New England

One Elm Street

Keene, New Hampshire 03431

2. Administrative Location:

Antioch - New England Graduate School

3. Degree(s) Offered in Outdoor Education:

M.S.T. - Environmental Studies (Emphasis on Environmental Education)

4. Total Number of Faculty, Full-time and Part-time:

Full-time: 1

Part-time: 2

5. Faculty Status and Education of Outdoor Education Faculty, Full-time and Part-time:

Full-time:

Minton, Ty G., Coordinator of Environmental Studies Program

B.A. - University of Colorado (Biology)

M.Ed. - Antioch Graduate School of Education (Environmental Education)

Doctoral Candidate - University of Massachusetts

Part-time:

Cadot, Meade

191

179

B.A. - Washington and Lee University (Biology)

M.S. - University of Kansas (Geology)

Ph.D. - University of Kansas (Geology)

--Thomashow, Mitchell

B.A. - New York University (Urban Problems)

M.A. - SUNY at Stony Brook (History of Technology and Social Change)

M.S.T. - Antioch - New England (Environmental Education)

6. Date Department Founded and Date Degree Program(s) Founded in Outdoor

Education:

1972 - M.S.T. - Environmental Studies (Emphasis on Environmental Education)

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

M.S.T. - Environmental Studies - 40 semester hours

8. Outdoor Education Course Titles and Descriptions:

Field Ecology: This is a series of courses designed to build a strong background in field ecology. The seasonal courses include topics in both plant and animal field ecology. Courses include practical work in the following areas: identification of organisms, use of biological keys; microscope work; analysis of ecosystem structure and function (ponds, streams, forests, fields, mountain habitats, sea-shore); succession in natural communities; physical aspects of the environment (geology, meteorology, soil science); natural history of plant and animal groups; animal behavior; and the distribution and abundance of plants and animals. The following courses are offered in field ecology:

Field Geology

Plant Ecology

Mammal Ecology

Ornithology

Freshwater Ecology

Marine Ecology

Field Botany

Entomology

Special Problems in Field Ecology

Ecological Theory: This course will introduce the student to the major thrusts of modern ecological thought and to ways of looking at plants and animals in their natural setting. Topics covered include: autecology, population biology, the nature of communities, species structures of communities, succession, bioenergetic cycles, and energetics.

Human Interaction with the Environment: Ecological theory has made it clear that all aspects of human activities are interrelated. Environmentalists must be aware of the socio-economic ramifications as well as the ecological considerations of planning decisions. How, in fact, are decisions to be made? To what extent is ecological theory relevant to the social sciences? How can environmental ethics be juxtaposed against the realities of economic development? This course should provide a forum for those questions. The following courses are offered as part of this track:

World Resource Distribution

Environmental Economics

Values, Planning, and the Environment

Environmental Perception

Regional Environmental Issues

Human Autecology and Physiology

Special Problems in Environmental Studies

Alternative Energy

Resource Management

General Biology: The course will focus on the structure and function of living systems: cell anatomy and physiology, genetics, evolution, and multicellular systems. The course will be based on levels of complexity in living systems from the atom to the biosphere and will attempt to relate basic life processes to ecosystem dynamics.

Environmental Education (History and Philosophy): The objective of this course is to provide students with an overview concerning the historical and philosophical development of conservation movements, nature-study groups, progressive education, and environmental education. The course examines the philosophy of environmental education and each student is asked to develop a philosophy of environmental education consistent with his/her professional goals.

Introduction to Environmental Science: This course examines the issue of environmental quality especially in regard to the technical knowledge that is essential in policy making. Topics such as: water and air quality analysis, pollution testing techniques, nuclear power, solid waste disposal, etc., will be covered.

9. Total Number of Students Graduated to Date in Outdoor Education Program(s)

45 M.S.T. - Environmental Studies (Emphasis on Environmental Education)

10. Approximate Number of Total Students in Various Degree Programs and Percentage of Those Students in Outdoor Education Program(s):

250 M.S.T. - Environmental Studies

40 (Emphasis on Environmental Education)

6% % of student enrollment in Outdoor Education Program(s)

11. Future Developments:

A. The program staff is searching for a permanent site for environmental education and field ecology activities. We are interested in moving adjacent to Pisgah State Park (Southwest New Hampshire) which contains twenty square miles rugged, undisturbed woodland.

B. We are considering the establishment of a master's program in Resource Management.

C. We have plans to develop an urban environmental education component of the program.

12. Describe any field campus or Environmental Education center used in your program(s):

Field classes are held at the Harris Foundation in Hancock, New Hampshire. This location serves as laboratory and classroom center. The adjacent private land (several thousand acres) and surrounding public lands contain a wide diversity of habitats and natural systems used for environmental studies classes. The proximity of the center to the White Mountains, the Atlantic Seashore, and the Connecticut River Valley provides opportunity for field study in these ecosystems.

GLASSBORO STATE COLLEGE

1. Name of Contact Person, Title, Location, Mailing Address and Phone:

Dr. V. Eugene Vivian

Professor of Environmental Studies

or

F. G. Patterson

Assistant Professor of Life Sciences

Department of Life Sciences

Glassboro State College

Glassboro, New Jersey 08028

Phone: 609/893-9151

2. Administrative Location:

Department of Life Sciences

Bosshart Hall

3. Degree(s) Offered in Outdoor Education:

B.S. or B.A. - Concentration in Environmental Education

B.S. - Life Sciences (Environmental Sciences Track)

M.A. - Outdoor Education and Conservation

4. Total Number of Faculty, Full-time and Part-time:

Full-time: 3

Part-time: 6

5. Faculty Status and Education of Outdoor Education Faculty, Full-time and Part-time:

Full-time:

Vivian, V. Eugene, Professor of Environmental Studies

Ph.D.

--Patterson, F. Garfield, Assistant Professor of Life Sciences

M.A.

--Sparks, Patricia M., Assistant Professor, Environmental Studies

Ed.D.

6. Date Department Founded and Date Degree Program(s) Founded in Outdoor Education:

1967 - M.A. - Outdoor Education and Conservation

1971 - B.S. - Life Sciences (Environmental Sciences Track)

1972 - B.S. or B.A. - Concentration in Environmental Education

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

B.S. or B.A. - Life Sciences - 124 semester hours

Concentration Environmental Studies - 12 semester hours

Environmental Science Track - 40 semester hours

M.A. - Outdoor Education and Conservation - 33 semester hours and

Thesis and Comprehensive Exam

8. Outdoor Education Course Titles and Descriptions:

9. Total Number of Students Graduated to Date in Outdoor Education

Program(s):

18 Environmental Track - Life Sciences

40 Concentration in Environmental Education

165 M.A. - Outdoor Education and Conservation

185

197

10. Approximate Number of Total Students in Various Degree Programs and Percentage of Those Students in Outdoor Education Program(s):

300 Environmental Studies

85 M.A. - Outdoor Education and Conservation

11. Future Developments:

A Master's degree in Environmental Sciences and Environmental Studies are both being planned for actual presentation in 1979.

12. Describe any field campus or Environmental Education center used in your program(s):

The Conservation and Environmental Studies Center at Browns Mills, New Jersey is used as the site for many course sessions, for field trips by classes, and for independent study and environmental internships. No fiscal support is provided by the College at the present time.

MONTCLAIR STATE COLLEGE

1. Name of Contact Person, Title, Location, Mailing Address and Phone:

Dr. W. Augustus Rentsch
Director of Environmental Studies
Montclair State College
Upper Montclair, New Jersey 07043
Phone: 201/893-4000

2. Administrative Location:

School of Professional Arts and Sciences

3. Degree(s) Offered in Outdoor Education:

M.A. - Environmental Studies (Emphasis in Environmental Education and/or
Outdoor Education)

4. Total Number of Faculty, Full-time and Part-time:

Full-time: 1

Part-time: 3

Qualification Status and Education of Outdoor Education Faculty, Full-time
and Part-time:

Full-time:

Rentsch, W. Augustus, Assistant Professor

B.A. - Adrian College (Biology - Education)

M.A. - Montclair State College (Outdoor Education)

Ph.D. - University of Michigan (Environmental Education)

6. Date Department Founded and Date Degree Program(s) Founded in Outdoor Education:

1973 - Environmental Studies

1966 - M.A. - Environmental Studies (Emphasis in Environmental Education and/or Outdoor Education)

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

M.A. - Environmental Studies - 33 semester hours

Emphasis in Environmental Education and/or Outdoor Education -

15-18 semester hours

8. Outdoor Education Course Titles and Descriptions:

Environmental Education: Foundations of environmental education: historical, theoretical, and conceptual. Includes models, gaming, encounters, and teaching strategies.

Conservation Education: Provide background in natural resource management: wildlife; fisheries; forests; water and related components of spaceship earth. Includes field trips.

Practicum in Environmental Education: Implementation of environmental education programs in both public and private institutions. Other emphasis depend upon student's needs.

Curriculum Development in Environmental Education: Development of environmental education curricula, courses of study, and instructional materials K-12.

Outdoor Teaching Sites for Environmental Education: Field-oriented course uses lecture, discussion and field activities; the integration of school sites into ongoing school curricula. Individualized and group project work on actual outdoor site development.

Workshop Utilizing Natural Environments: Basic understanding of how natural environments may be used to supplement classroom experiences in natural science, social studies, humanities and outdoor pursuits.

Field Studies in Humanities and Natural Science: Provides an understanding of how the humanities and sciences, taught in natural environments, develops environmental sensitivity.

Field Studies in Social Studies and Outdoor Recreation: Provides an understanding of how outdoor pursuits and social studies may be taught, using natural environments, to develop environmental sensitivity.

9. Total Number of Students Graduated to Date in Outdoor Education

Program(s):

Approximately 25 students graduate each year.

10. Approximate Number of Total Students in Various Degree Programs and Percentage of Those Students in Outdoor Education Program(s):

120 M.A. - Environmental Studies

100 M.A. - Environmental Studies (Emphasis in Environmental Education and/or Outdoor Education)

80% % of student enrollment in Outdoor Education Program(s)

11. Future Developments:

The Department of Environmental Studies is now completing a Cooperative Graduate Education program for students to receive full-time wages and college credit for their work experience.

12. Describe any field campus or Environmental Education center used in your program(s):

Montclair State College administers the School of Conservation (Stokes State Forest). It provides three resident fellowships for students matriculated in the M.A. program. At present it provides the setting for primarily elementary school students three-day outdoor education experiences, during the academic year. For three weekends, the one semester hour undergraduate courses are taught each academic year. During the summer months a variety of three semester hour courses including outdoor education are taught in the setting of the woods, stream, and beautiful lake. The School of Conservation Campus is approximately one hour from the Montclair Campus.

CORNELL UNIVERSITY

1. Name of Contact Person, Title, Location, Mailing Address and Phone:

Dr. Richard B. Fischer

Coordinator

Environmental Education Program

Cornell University

Ithaca, New York 14853

Phone: 607/256/5410

2. Administrative Location:

Department of Education

New York State College of Agriculture and Life Sciences

3. Degree(s) Offered in Outdoor Education:

B.S. - Environmental Education

M.S. - Environmental Education

M.S.T. - Environmental Education

Ph.D. - Environmental Education

4. Total Number of Faculty, Full-time and Part-time:

Full-time: 3

Part-time: 0

5. Faculty Status and Education of Outdoor Education Faculty, Full-time and Part-time:

Full-time:

Fischer, Richard B., Professor

B.S. - Queens College (Biology)

M.A. - Teachers College (Science Education)

Ph.D. - Cornell University (Zoology and Environmental Education)

--Rockcastle, Verne N., Professor

B.S. - New York State College of Forestry (Forestry)

M.S. - Massachusetts Institute of Technology (Meteorology)

Ph.D. - Cornell University (Science Education and Zoology)

--Novak, Joseph D., Professor

B.S. - University of Minnesota (Biology)

M.S. - University of Minnesota (Botany)

Ph.D. - Purdue University (Science Education)

6. Date Department Founded and Date Degree Program(s) Founded in Outdoor Education:

1911 - Department of Education

1888 - Environmental Education Program

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

B.S. - Environmental Education - 120 credit hours; of which approximately 50 are required in Biology, Ecology, Chemistry, Physics, and Mathematics; approximately 20 more must be elected in the above areas; approximately 18 credits in Education courses are required.

M.S., M.S.T., Ph.D. - Awarded on basis of residence credit when, in the opinion of his Graduate Committee, he has spent a semester in full-time graduate study and has performed satisfactorily. For the Master's, a student must earn two units of residence credit beyond the Bachelor's Degree. For a doctoral candidate, it is six units, two of which, on

petition by the student's Graduate Committee, can be credited from a Master's Degree. The program of study of each graduate student, consisting of courses and special projects, is designed individually by each student with his Graduate Committee.

8. Outdoor Education Course Titles and Descriptions:

Field Natural History: This course is designed for persons planning careers in environmental education centers, junior museums, school systems and field biology courses. Lectures and weekly field trips acquaint students with northeastern plants, animals, and their environments along with methods of using them as teaching resources. Man's impact on biological communities, and his obligations towards them, are emphasized.

Environmental and Natural History Writing: This course is designed for persons who want a second level course to improve their ability to reach and influence others through publishing in magazines and newspapers. A working knowledge of biology and ecology is assumed. The class produces a weekly environmental awareness column for a local newspaper, and publishes Environmental Synopsis as a service to the profession. Subject matter includes outlets for articles, news releases, and preparation of newsletters and brochures, all aimed at changing environmental attitudes and behavior.

Teaching Elementary Science: An analysis and synthesis of science concepts and related behaviors for children and young adults, with special emphasis on sequencing and instruction in school and environmental centers. Includes practical experiences in local schools and youth centers.

Our Physical Environment: A practical study of the basic physical principles of the environment, with special reference to the kind of analysis that might aid in teaching others about these principles. Includes commonplace phenomena in physics and earth science and relates these to the biological sciences. Includes a two week unit on photography and darkroom procedures. Especially useful for teachers and environmental educators.

Implementing Instruction: A study of the elements of effective instruction in lecture, laboratory, seminar, field trip, and other modes of instruction. Actual practice in developing and presenting various modes of instruction, with critiques by the class.

Literature in Conservation and Environmental Education: Examination of books, periodicals, reports dealing with historical and present aspects of environmental quality and education. Students are involved in planning and offering the lectures, discussions, literature reports.

Learning Theory as a Basis for Education: This course is intended for persons interested in the improvement of educational programs through the application of new knowledge in learning theory. The course is conducted in seminar style with discussions based on assigned readings and contributions of class members. The learning theory of David Ausubel is presented in some detail and other writers on cognitive and affective learning are also studied. A major assignment in the course is the analysis of instruction on the basis of the concepts presented.

Field Experience: A student may engage in planned semi-professional or professional practice in an educational enterprise. Each student prepares a plan of action including rationale, purposes, and procedures, and arranges with a faculty member to supervise and evaluate the field experience.

Study: A student may, with approval of a faculty advisor, study a problem or topic not covered in a regular course, or may undertake tutorial study of an independent nature in an area of educational interest.

Internship in Education: Opportunity for practical experience in educational professions development.

Graduate Seminar in Science and Environmental Education:
Coordinates various interest groups in science and environmental education. Currently the seminar has a focus on the development of a curriculum in environmental education.

9. Total Number of Students Graduated to Date in Outdoor Education

Program(s):

Since our Environmental Education Program began more than three-quarters of a century ago, we can only estimate the number of graduates and undergraduates to be many hundreds.

10. Approximate Number of Total Students in Various Degree Programs and Percentage of Those Students in Outdoor Education Program(s):

Unable to give percentages. We annually award approximately 25 graduate degrees and 10 undergraduate degrees.

11. Future Developments:

Although several environmental education centers are within two hours driving time, we have not had a facility close by the University, close enough for students to go there and spend part of a day gaining practical experience. This is changing, for we are now part of a center that is developing a center and a curriculum suited to schools in the area that the center will serve. Now in its second year of development and service, the Cayuga Center (as it is called) has a resident director, day and resident programs, and is serving as a training ground for Cornell students. Like other institutions, we also look forward to the addition of faculty.

12. Describe any field campus or Environmental Education center used in your program(s):

We might add that the University does own and operate two large facilities which, while not wholly oriented toward environmental education, do have strong environmental education components. One is the 4000 acre Arnot Forest, a research and demonstration tract administered by our Natural Resources Department. In cooperation with that Department, we have sponsored many summer teacher in-service workshops. The Natural Resources Department itself has operated numerous 4-H leadership training workshops during the summer. The second facility is Cornell Plantations, a university-wide organization which, it must be stated clearly at the outset, does not have any plantations! (Various departments in the College of Agriculture do indeed operate all sorts of plantations.) Cornell Plantations does oversee a number

of critically important teaching and research lands that include forest, marsh, bog and wildflower preserves. Like Arnot Forest, these plantation lands are available to all students and faculty; they are heavily used and have provided the setting for numerous graduate degree research studies.

STATE UNIVERSITY COLLEGE AT CORTLAND

1. Name of Contact Person, Title, Location, Mailing Address and Phone:

Dr. Charles A. Lewis

Chairperson

Department of Recreation Education

State University College

Cortland, New York 13045

Phone: 607/753-4951

2. Administrative Location:

Division of Health, Physical Education and Recreation

3. Degree(s) Offered in Outdoor Education:

B.S. - Recreation (Concentration in Nature Recreation and Interpretation)

B.S.E. - Recreation Education (Concentration in Nature Recreation and Interpretation)

M.S. - Recreation (Concentration in Nature Recreation and Interpretation)

M.S.E - Recreation Education (Concentration in Nature Recreation and Interpretation)

4. Total Number of Faculty, Full-time and Part-time:

Full-time: 6

Part-time: 3

5. Faculty Status and Education of Outdoor Education Faculty, Full-time and Part-time:

Carlson, Marcia K.

B.S. - Slippery Rock (Physical Education)

M.Ed. - University of Pittsburgh (Education)

Ph.D. - Syracuse University (Elementary Education)

, Charles A., Chairperson

B.S. - New York State Maritime College (Marine Science)

M.S. - Hofstra University (Secondary Education)

M.A. - C. W. Post College (English)

Ph.D. - New York University (Outdoor Education)

6. Date Department Founded and Date Degree Program(s) Founded in Outdoor Education:

1948 - Department of Recreation Education

1948 - M.S.E. - Recreation Education (Concentration in Nature Recreation and Interpretation)

1971 - M.S. - Recreation Education (Concentration in Nature Recreation and Interpretation)

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

Graduate program - 30 hours

Recreation - 18 hours

Concentration area - 9 hours

8. Outdoor Education Course Titles and Descriptions:

Outdoor Education and Camp Counseling: Knowledge, skills,

practices in outdoor education. Methods, techniques of camp counseling, programming.

Outdoor Education Practicum: Ecological relationships; development of outdoor skills applicable to current practices.

Outdoor Education for Teachers: Curriculum development, trend in outdoor education. Curriculum development, teaching in natural environment. Field trips, laboratory experiences. For Elementary Education majors and those having consent of instructor.

Seminar in the Disciplines: Health, Physical Education, Recreation: Current trends, issues in related fields of health, physical education, recreation. Relationships among fields, uniqueness of each.

Administrative Problems Related to Camping: Detailed analysis of administrative problems in establishment, operation of resident and day camps. Research literature, current problems for camp director.

9. Total Number of Students Graduated to Date in Outdoor Education Program(s):

Data not readily available

10. Approximate Number of Total Students in Various Degree Programs and Percentage of Those Students in Outdoor Education Program(s):

Data not readily available

11. Future Developments:

None projected at this time

12. Describe any field campus or Environmental Education center used in your program(s):

State University College Cortland, Outdoor Education Center

Kanawatch Lake, New York 13436, Phone: 315/354-4784.

1. Name of Contact Person, Title, Location, Mailing Address and Phone:

Dr. Richard E. McBride

Professor of Science Education

Faculty of Education

State University College

New Paltz, New York 12561

Phone: 912/257-2147

2. Administrative Location:

Faculty of Education, Department of Elementary Education

3. Degree(s) Offered in Outdoor Education:

M.S. - Education (Concentration in Environmental Education)

4. Total Number of Faculty, Full-time and Part-time:

Full-time: 2

Part-time: 3

5. Faculty Status and Education of Outdoor Education Faculty, Full-time and Part-time:

Full-time:

Reeves, Kent, Director, Ashokan Field Campus and Assistant Professor

B.S. - Michigan State University

M.S. - Southern Illinois University

--Angstrom, Andrew, Assistant Director, Ashokan Field Campus

B.S. - State University College

M.S. - State University College

Part-time:

McBride, Richard E., Professor of Science Education

B.S. - Brockport State

M.A. - Teachers College, Columbia University

Ed.D. - Cornell University

--McKnight, Betty J., Associate Professor

B.S. - Cortland State

M.S. - Syracuse University

Ph.D. - Cornell University

--Wagner, Bartlett A., Professor, Elementary Education

B.S. - Southern Connecticut State

M.S. - University of Bridgeport

Ph.D. - University of Connecticut

6. Date Department Founded and Date Degree Program(s) Founded in Outdoor Education:

1886 - State Normal School

1976 - M.S. - Education (Concentration in Environmental Education)

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

M.S. - Education (Concentration in Environmental Education) - 36 credit hours

Curriculum and Environmental Education - 18 credit hours

Foundations of Education - 3 credit hours

Research and Evaluation - 3 credit hours

Liberal Arts - 9 credit hours

Seminar (Environmental Education Emphasis) - 3 credit hours

8. Outdoor Education Course Titles and Descriptions:

Field Studies in Environmental Education: Study of common living organisms and relationships readily observable in a child's urban and rural environment.

Developing Environmental Education Programs: Opportunity for teachers and administrators to evaluate their own environmental education programs and to work cooperatively to design an integrated environmental program.

Workshop in Environmental Education for Teachers: Activity oriented, presenting an interdisciplinary approach for teaching environmental concepts to children.

Internship in Environmental Education: Provides a unique opportunity for students to work in a nature center, environmental education center or summer camp. Designed to use strengths of an individual and to broaden his or her background.

Teaching the Age of Homespun: "Hands on" experience in using and making articles from the 1830 village and farm life era.

Selected Topics: Course offering varies each semester, may take field trips to the Adirondack Mountains to study the natural environment or trace the route of the voyageurs emphasizing the historical and environmental impact of the fur trade on the Northwest.

9. Total Number of Students Graduated to Date in Outdoor Education Program(s):

2 M.S. - Education (Concentration in Environmental Education)

10. Approximate Number of Total Students in Various Degree Programs and Percentage of Those Students in Outdoor Education Program(s):

199 M.S. - Education

8 M.S. - Education (Concentration in Environmental Education)

2% % of student enrollment in Outdoor Education Program(s)

11. Future Developments:

The Ashokan Field Campus, in conjunction with the Department of Elementary Education, will be providing additional graduate course offerings on the main campus, the field campus, and sponsoring wilderness trips to the Catskills and Adirondack Mountains, and Canada.

12. Describe any field campus or Environmental Education center used in your program(s):

The Ashokan Field Campus occupies a 375 acre site in the Catskills. It offers a year-round outdoor education, camping and recreation program. Cabins accommodate 75 persons and meal service is available. A working colonial craftsman village, lodge, bathhouse and sauna provide a variety of activities for all types of outdoor recreation. A four-acre lake affords swimming, boating, canoeing, skating and pond study.

STATE UNIVERSITY COLLEGE AT PLATTSBURGH

1. Name of Contact Person, Title, Location, Mailing Address and Phone:

Dr. Ernest Coons

Coordinator of Outdoor Education - Recreation

Plattsburgh State University

College of Arts and Science

Plattsburgh, New York 12901

Phone: 518/564-3140

2. Administrative Location:

Division of Health, Physical Education and Recreation

3. Degree(s) Offered in Outdoor Education:

Elective Concentration in Outdoor Education on Graduate Level.

4. Total Number of Faculty, Full-time and Part-time:

Full-time: 1

Part-time: 1

5. Faculty Status and Education of Outdoor Education Faculty, Full-time and Part-time:

Full-time:

Coons, Ernest, Professor

B.S. - Springfield College

M.Ed. - Springfield College

Ph.D. - University of New Mexico

6. Date Department Founded and Date Degree Program(s) Founded in Outdoor Education:

1975 - Concentration in Outdoor Education on Graduate level

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

Elective Concentration in Outdoor Education on Graduate level - 15 hours

8. Outdoor Education Course Titles and Descriptions:

Principles and Philosophy of Outdoor Education and Recreation:

This course will present the philosophies of outdoor education and recreation, the historical development, concepts in the nature of learning, characteristics of outdoor education and its uniqueness as a method of learning and a general overview of the techniques to develop an idea into an implementable project.

Outdoor Education Program Planning for the Classroom Teacher:

This course is designed to familiarize graduate students, teachers and administrators with the outdoor education method emphasizing the elementary level. This course will offer the necessary skills, understandings, and basic knowledge necessary to plan and carry out a program in outdoor education which will enrich the pupil's classroom experience in all fields: math, science, arts, language arts, social studies, and in effective group dynamics. These academic areas will be correlated with the real needs of the curriculum and the natural environment with emphasis on the uniqueness of the school site, urban settings, rural settings on both a school day and resident center basis.

Planning the Outdoor Education Program for the Secondary School:

This course will offer the skills and knowledge to develop an outdoor education program on the secondary level. Included will be an overview of existing practices of outdoor education in the secondary schools, emphasis on resident experiences in meeting curriculum needs.

Planning the Outdoor Education Program for Agency Settings:

Outdoor Education programs will be developed in all curriculum areas using the interdisciplinary approach in meeting the unique needs of both different settings and children with special needs. The uniqueness of the outdoor education method will be correlated with the identified needs of the various "special" populations and programs will be developed with emphasis on research and evaluation.

Survey of Outdoor Education Resources and Existing Practices:

This survey course is designed to present existing resources commonly employed with the outdoor education method -- films, literature, field equipment, mobile units, etc. A review of the main types of outdoor education programs found in New York State will be emphasized with a week of actual visits to five different programs selected to provide first-hand experience in innovative programming. emphasis will be on the development of a philosophical point of view and skills necessary to implement the philosophy through programs and budgets.

Seminar in Outdoor Education: This graduate level seminar will offer an exchange of ideas between students, students - professor, and with visiting consultants to consider outdoor education, past, present and future implications in meeting the curriculum needs of children at all levels in all settings. Review of research and literature will be emphasized.

9. Total Number of Students Graduated to Date in Outdoor Education Program(s):

12 Elective Concentration in Outdoor Education on Graduate level

10. Approximate Number of Total Students in Various Degree Programs and Percentage of Those Students in Outdoor Education Program(s):

75 Recreation students

56 Elective Concentration in Outdoor Education on Graduate level

11. Future Developments:

Here at Plattsburgh we do a great deal of grant implementation for school districts in New York.

12. Describe any field campus or Environmental Education center used in your program(s):

Resident Center - Twin Valleys, Lewis, New York (763 acres)

Campus Center - Rugar Woods, Plattsburgh, New York (83 acres)

STATE UNIVERSITY OF NEW YORK
COLLEGE OF ENVIRONMENTAL SCIENCE AND FORESTRY AT SYRACUSE

1. Name of Contact Person, Title, Location, Mailing Address and Phone:

Dr. David L. Hanselman

Associate Professor

Environmental Education/Communications

State University of New York

College of Environmental Science and Forestry

Syracuse, New York 13210

Phone: 315/473-8761

2. Administrative Location:

School of Environmental and Resource Management or (interdisciplinary)

Graduate Program in Environmental Science

3. Degree(s) Offered in Outdoor Education:

B.S. - Resources Management (Concentration in Communications)

M.S. - Environmental Education/Communications

Ph.D. - Environmental Education/Communications

4. Total Number of Faculty, Full-time and Part-time:

At the College of Environmental Science and Forestry, 15-20 members of the faculty are regularly involved in graduate programs in environmental education and communications. In addition, the programs frequently employ faculty from Syracuse University, faculty from other institutions and non-faculty professionals in the field.

5. Faculty Status and Education of Outdoor Education Faculty, Full-time and Part-time:

Full-time:

Hanselman, David L. - Head, Program Unit in Environmental Education/Communications (GPES); Associate Professor, College of Environmental Science and Forestry, School of Environmental Resource and Management.

B.S. - Cornell University (Wildlife Management)

M.S. - Cornell University (Conservation Education)

Ph.D. - The Ohio State University (Interdisciplinary in Natural Resources)

6. Date Department Founded and Date Degree Program(s) Founded in Outdoor Education:

1911 - College of Environmental Science and Forestry

1970 - B.S. - Resource Management (Concentration in Communications)

1975 - M.S. - Environmental Education/Communications

1975 - Ph.D. - Environmental Education/Communications

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

8. Outdoor Education Course Titles and Descriptions:

(as contrasted with general course requirements)

Not applicable because most work in Environmental Education/Communications is at the graduate level. Seminars, individual studies, thesis research and internship experience comprise the majority of the "courses." Courses have been established in Applied Communications, Message Design, Environmental Education Strategies. However, heavy

use is made of specialized education and communications courses at Syracuse University in relationship to courses in environmental science and management. Students are expected to devise a program which creates its own synthesis through a combination of discipline courses (environmental biology, resources management and policy, regional planning, education, journalism, etc.)...

9. Total Number of Students Graduated to Date in Outdoor Education

Program(s):

At any one time, 10 to 15 students are admitted to graduate programs in environmental education/communications.

10. Approximate Number of Total Students in Various Degree Programs and Percentage of Those Students in Outdoor Education Program(s):

At present, 1,530 students are pursuing a Bachelor of Science degree, 195 are pursuing a Master of Science degree, 32 are pursuing a Master of Landscape Architecture degree and 84 are pursuing Doctoral degrees at the College of Environmental Science and Forestry.

11. Future Developments:

12. Describe any field campus or Environmental Education center used in your program(s):

The College of Environmental Science and Forestry has the distinction of being the "largest campus" in the United States. The field campuses are: Cranberry Lake, Ellis International Island, Newcomb, Tully, Wanakena, and Warrensburg. In addition, many students do intern projects at the Beaver Lake Nature Center (12 miles from campus).

APPALACHIAN STATE UNIVERSITY

1. Name of Contact Person, Title, Location, Mailing Address and Phone:

Dr. I. W. Carpenter, Jr.

Chairman

Department of Biology

Appalachian State University

Boone, North Carolina 28608

Phone: 704/262-3052

2. Administrative Location:

Department of Biology, College of Arts and Sciences

3. Degree(s) Offered in Outdoor Education:

B.S. - Biology (Concentration in Naturalist Program)

4. Total Number of Faculty, Full-time and Part-time:

Full-time: 10

Part-time: 1

5. Faculty Status and Education of Outdoor Education Faculty, Full-time and Part-time:

Carpenter, I.W., Jr. - Professor (Botany-Forestry)

B.S. - Purdue University

M.A. - Purdue University

Ph.D. - Purdue University

--Glover, Sandra - Associate Professor (Entomology)

B.S. - Northwestern University

M.Ed. - Louisiana State University

- Ph.D. - University of Georgia
- Derrick, Ray - Professor (Ichthyology)
- B.S. - University of South Carolina
- M.S. - University of South Carolina
- Ph.D. - University of South Carolina
- Randall, Frank - Professor (Vertebrate Zoology)
- A.B. - University of North Carolina at Chapel Hill
- M.S. - University of Michigan
- Ph.D. - University of South Carolina
- Henson, Richard, Associate Professor (Invertebrate Zoology)
- B.S. - Lamar State College
- M.S. - Texas A&M University
- Ph.D. - Texas A&M University
- Bond, Joseph J. - Assistant Professor (Mycologist)
- B.A. - Centre College
- M.S. - East Tennessee State University
- Ph.D. - North Carolina State University
- Hicks, Marie - Assistant Professor (Botany)
- B.A. - Appalachian State University
- M.A. - Appalachian State University
- Ph.D. - University of Tennessee
- Connell, Mary - Assistant Professor (Phycology)
- A.B. - Marshall University
- M.S. - Marshall University
- Ph.D. - Kent State University
- Greene, Edgar, Jr. - Assistant Professor (Science Education)

B.S. - Appalachian State University

M.S. - Appalachian State University

Ph.D. - Florida State University

--Robinson, Kent - Professor (Science Education)

B.S. - Appalachian State University

M.S. - Appalachian State University

Ph.D. - Ohio State University

--Mackay, John L., Jr. - Instructor and Director, Office of Environmental Studies

B.A. - University of North Carolina at Greensboro

M.A. - Appalachian State University

6. Date Department Founded and Date Degree Program(s) Founded in Outdoor Education:

1946 - Department of Biology

1975 - Naturalist Program

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

B.S. - Biology - 120 semester hours

Concentration in Naturalist Program - 24 semester hours in core subjects and 45 semester hours in program subjects

8. Outdoor Education Course Titles and Descriptions:

Botany I: Historical background of botany

Botany II: Phylogenetic approach to reproduction, anatomy, and morphology of representative plant groups.

Ecology: Principles of ecology, energy flow, adaptations, succession, abiotic factors, economic aspects and distribution of organisms.

Systematic Botany: Principles of plant taxonomy of the vascular flora.

Ornithology: The morphology, physiology, natural history and identification of birds.

Entomology: Comparative study of the insecta and related arthropods with emphasis on morphology and systematics.

Cryptogamic Botany: Investigations of the algae, liverworts and mosses.

Marine Biology: Introduction to the more common marine organisms, including morphology, taxonomy, ecology and economic aspects.

Mycology: Investigations of the fungi.

Herpetology: An investigation of the morphology, taxonomy and distribution of amphibians and reptiles.

Phycology: The morphological and taxonomic investigation of the major phyla of the algae.

Meteorology and Climatology: Introductory concepts of atmospheric processes and their relationships to man are developed.

Geology: Description of the composition and origin of earth materials, and processes changing the earth.

History: The teaching of state and local history.

Recreation: Introduction to recreation and leadership.

*Elective Coursework: Special topics available in Environmental Education, Natural History Interpretation and Development of Environmental Education Center.

9. Total Number of Students Graduated to Date in Outdoor Education Program(s)

4 B.S. - Biology (Concentration in Naturalist Program)

10. Approximate Number of Total Students in Various Degree Programs and

Percentage of Those Students in Outdoor Education Program(s):

250 B.A. and B.S. - Biology

100 B.S. - Biology (Concentration in Naturalist Program)

40% % of Student Enrollment in Outdoor Education Program(s)

11. Future Developments:

Appalachian State University's Department of Biology is developing the Naturalist Program to provide a wide range of formal and experiential training to pre-professionals seeking careers in this field. Greater cooperation with other University offices and departments, along with state and local resource management agencies, is being sought to encourage development of "field" internships and other experiences for students. Experiential opportunities are being developed in Nature Centers, State and National Parks, Environmental Education Centers and programs involving two University-owned facilities: Camp Broadstone Residential Outdoor Education Center and the Appalachian Environmental Education Center.

12. Describe any field campus or Environmental Education Center used in your program(s):

The University operates Camp Broadstone Residential Outdoor Education Center, a recreation and outdoor/environmental education facility located in Valle Crucis, North Carolina, approximately six miles from the University Campus. Broadstone is utilized on a year-round basis and provides programs in outdoor/environmental education to a variety

of student groups, private organizations and public school children. "Field experiences" are available to students enrolled in the Naturalist Program.

The University is currently developing a 90-acre site of unspoiled land adjacent to the University campus to serve as an Environmental Education Center. The Center will serve University students and faculty, public school children and their teachers, and the community by providing both formal and informal nonresidential environmental education programs. "Field" opportunities are utilized by students enrolled in the Naturalist Program.

Another related supportive program is the ASU Project Summit Program, offering to students Outward Bound-like opportunities (for credit) involving a variety of experientially-based activities. These opportunities are utilized by students enrolled in the Naturalist Program.

UNIVERSITY OF NORTH CAROLINA AT GREENSBORO

1. Name of Contact Person, Title, Location, Mailing Address and Phone:

Dr. Russel E. Bachert, Jr.

Assistant Professor of Outdoor/Environmental Education

Division of Recreation

University of North Carolina at Greensboro

Greensboro, North Carolina 27412

Phone: 919/379-5327

2. Administrative Location:

School of Health, Physical Education and Recreation

3. Degree(s) Offered in Outdoor Education:

B.S. - Recreation (Concentration in Outdoor/Environmental Education)

4. Total Number of Faculty, Full-time and Part-time:

Full-time: 3

Part-time: 1

5. Faculty Status and Education of Outdoor Education Faculty, Full-time and Part-time:

Full-time:

Bachert, Jr., Russel E., Assistant Professor

B.S. - Millersville State College (Elementary Education)

M.S. - Northern Illinois University (Outdoor Teacher Education)

M.S. - Indiana University (Park and Recreation Administration)

Ed.D. - Indiana University (Adult Education/Park and Recreation Administration)

6. Date Department Founded and Date Degree Program(s) Founded in Outdoor Education:

1976 - Division of Recreation

1976 - B.S. - Recreation (Concentration in Outdoor/Environmental Education)

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

B.S. - Recreation - 122 semester hours

Concentration in Outdoor/Environmental Education - 24 semester hours
plus 12 hours related cognate

Related cognate in Natural Sciences - 12 hours

8. Outdoor Education Course Titles and Descriptions:

Outdoor/Environmental Education: Study of the historical and philosophical foundations of outdoor/environmental education. Exploration of the various types of programs -- national and international. Survey of current professional preparation and opportunities, organizations, publications and research.

Interpretive Techniques for Outdoor/Environmental Education:
Study of the leadership - learning process as it relates to outdoor/environmental education settings. Emphasis on teaching skills and interpretive techniques. Evaluation of commercial and self-made interpretive resource materials.

Development of Outdoor/Environmental Education Programs: Evaluation of criteria for developing outdoor/environmental programs, including program elements, needs assessments, and resource inventories. Examination of the methods and techniques of program implementation and program evaluation.

Management of Outdoor/Environmental Education Centers: Guidelines for organizing and managing outdoor/environmental education centers. Special reference to developing and evaluating goals and objectives, personnel, business procedures, programs, and public relations. Development of an administrative manual to achieve and guide management procedures.

9. Total Number of Students Graduated to Date in Outdoor Education Program(s):
B.S. - Recreation (Concentration in Outdoor/Environmental Education) -
none to date.

10. Approximate Number of Total Students in Various Degree Programs and Percentage of Those Students in Outdoor Education Program(s):

90 B.S. - Recreation

-- B.S. - Recreation (Concentration in Outdoor/Environmental Education)

-- % of Student Enrollment in Outdoor Education Program 0

11. Future Developments:

The University of North Carolina - Greensboro, Division of Recreation is developing an interdisciplinary approach to outdoor-environmental education through involvement with other university faculty and schools.

The Piney Lake Field Campus within the Division of Recreation serves as a Recreation and Environmental Education Center for students.

Field experiences, environmental education programs and an environmental education research center are being developed at the Field Campus to enhance the concentration in outdoor/environmental education programs.

A graduate program in outdoor/environmental education and the addition of faculty are envisioned in the near future.

12. Describe any field campus or Environmental Education center used in your program(s):

The University owns Piney Lake Field Campus, a recreation and environmental education center. It is now being developed to encompass the education of students in outdoor/environmental education. Environmental education programs and research are centered at this 44-acre facility, located only 15 minutes from the University.

OHIO STATE UNIVERSITY AT COLUMBUS

1. Name of Contact Person, Title, Location, Mailing Address and Phone:

Dr. Robert E. Roth

Chairman

Division of Environmental Education

School of Natural Resources

The Ohio State University

124 West 17th Avenue

Columbus, Ohio 43210

Phone: 614/422-5589

2. Administrative Location:

School of Natural Resources

3. Degree(s) Offered in Outdoor Education:

B.Sc. - Natural Resources

M.Sc. - Natural Resources (Specialization in Environmental Interpretation or Environmental Education)

4. Total Number of Faculty, Full-time and Part-time:

Full-time: 2

Part-time: 3

5. Faculty Status and Education of Outdoor Education Faculty, Full-time and Part-time:

Full-time:

Roth, Robert E., Chairman and Associate Professor

B.Sc. - The Ohio State University (Wildlife Management and Secondary Science Education)

M.Sc. - The Ohio State University (Conservation Education)

Ph.D. - University of Wisconsin (Environmental Education)

--Cherem, Gabriel J., Assistant Professor of Environmental Interpretation

B.Sc. - University of Michigan (Naturalist Program, emphasizing Wildlife)

M.Sc. - University of Michigan (Outdoor Recreation)

Ph.D. - University of Michigan (Recreation Behavior)

Part-time:

--Johnson, Carl S., Professor

Elementary Teaching Certificate, Pine River Normal School

B.Ed. - St. Cloud (Minnesota) State Teachers College (Elementary Education)

M.Sc. - The Ohio State University (Education)

Ph.D. - The Ohio State University (Conservation)

--Disinger, John F., Associate Professor

B.Sc. - State Teachers College (Elementary Education)

Ed.M. - University of Rochester (Secondary Education)

Ph.D. - The Ohio State University (Major in Science Education, Minor in Geology)

--Bowman, Mary Lynne, Assistant Professor

B.Sc. - The Ohio State University (Music Education)

M.A. - The Ohio State University (Education)

Ph.D. - The Ohio State University (Major in Education Curriculum & Instruction, Minor in Environmental Education)

6. Date Department Founded and Date Degree Program(s) Founded in Outdoor Education:

1968 - School of Natural Resources (Activated in 1969)

1968 - B.Sc. - Natural Resources (Specialization in Environmental Interpretation or Environmental Education)

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

B.Sc. - Environmental Interpretation - 196 quarter hours

Concentration in Natural Resources - 59-65 quarter hours

Concentration in Interpretation - 18-20 quarter hours

Double degree program with the College of Education - 241-246 quarter hours

8. Outdoor Education Course Titles and Descriptions:

Work Experience in Natural Resources: Transcript credit for work experience in or related to student's specialization. The student must secure approval of his major advisor prior to employment and submit a final written report by the second week of the first quarter in school following the work. Employment must be equivalent to 10 weeks full time.

Introduction to Environmental Management: The nature and scope of environmental problems, technical, and socio-economic management strategies highlighting alternative approaches to environmental problem solution. The development of personal and professional basis for conservation and environmental accomplishment is stressed.

Conservation Agencies: Investigation of history and responsibilities of government agencies and some private organizations for

natural resources management. "Who does what?" Representatives of Conservation/Environmental agencies present their programs and problems.

Natural Resources Interpretation/Education Program Development in the Urban Setting: Field experience in planning and implementing natural resources interpretation/education programs/projects in an urban community.

Natural History of Ohio: Field course emphasizing the interrelationship among area geology, soil, flora, fauna, and climate in various ecological communities found in Ohio. Field techniques and identification skills are tools used in collecting data for research paper. The course is designed for students who have minimal background in ecology and biological sciences; preservice and inservice elementary and junior high teachers could especially profit from this introductory, comprehensive course.

Interpretive Centers: A detailed examination of visitor centers, nature centers and other interpretive centers. Considerations include their function, visitorship, and integration with the natural environment

Interpretive Exhibit Preparation: Exposure to the design, construction, and evaluation of active visitor involvement exhibits for use in public and private interpretive centers.

Interpretive Field Studies: A short-course, inter-session course or study tour which will involve travel to regional or national interpretive facilities. In-depth analysis of each facility.

Interpretive Programming and Planning: Case studies of public and private interpretive programs. Practice in interpretive master planning and in the comprehensive programming of interpretive services for a site.

Resident Outdoor Education Participation: An experience-centered offering in resident outdoor education for schools.

Interactions in Resource Management: Impact of man's activity on natural resources; interrelationships among physical, social, economic, and political environments and resources; prospects for effective resource management. Techniques of environmental impact assessment are considered.

Watershed Resource Evaluation: In-depth field study and evaluation of natural resource parameters and management interactions within a small watershed.

Environmental Interpretation Methods: An overview course covering the concept of the interpreter, basic interpretive principles, visitor characteristics, and the range of interpretive services.

Field Course in Conservation and Outdoor Education: Examination of environmental problems and alternative management strategies in relation to environmental education program development and application. Materials, activities, and evaluation techniques will be developed for classroom use.

Environmental Education in the Park Setting: Use of public park facilities and services in accomplishing environmental education objectives. Offered in cooperation with public parks agencies.

Internship in Natural Resources Professions: Internship employment for a minimum of 3 months in environmental education-related professions; arranged with cooperating natural resource or environmental agencies, organizations, or industries.

Workshop in Environmental Education: Arranged in cooperation

with local schools or districts.. General concerns of introduction (K-12) of environmental education with considerations of both traditional and innovative methodologies, including current developments in content, materials, and classroom implementation strategies. The specific focus of the course varies from quarter to quarter.

Individual Studies in Natural Resources: Repeatable to a maximum of 10 credit hours.

Group Studies: Group studies focusing on conservation and outdoor-education topics including the nature and management of natural resources.

Simulation in Natural Resources Management: Interactive aspects of community resource management problems with particular respect to air pollution through group involvement in computerized simulation. No computer background is required.

Alternative Futures and Resource Management: A critical analysis of modeling approaches to the extrapolation of alternative world futures with particular attention to natural resources management considerations.

Program Development in Environmental Education: Development of environmental education programs with respect to the situation of participants. Existing programs are studied as models to aid in development of unique programs. Use is made of materials available through the ERIC System, particularly through ERIC/SMEAC, as well as other sources.

Interdepartmental Seminar in Natural Resources: Seminars in natural resource conservation. Given cooperatively by the School of Natural Resources and the following departments: Agronomy, Agricultural Economics and Rural Sociology, Agricultural Engineering, Geography,

Horticulture, and Plant Pathology. Among seminars is one primarily in Environmental Education.

Research: Research for thesis or dissertation purposes only.

9. Total Number of Students Graduated to Date in Outdoor Education

Program(s):

95 Interpretive Work/Environmental Interpretation

25 Double Degree

39 M.Sc. - Natural Resources (Specialization in Environmental Interpretation or Environmental Education)

10. Approximate Number of Total Students in Various Degree Programs and Percentage of Those Students in Outdoor Education Program(s):

18 Specialization in Environmental Education

65 Specialization in Environmental Interpretation

11. Future Developments:

Block scheduled resident outdoor education will be held Autumn Quarter 1977 at the Barnebey Center for Environmental Studies with faculty from Health, Physical Education and Recreation; Elementary Education; and the Division of Environmental Education (School of Natural Resources) participating.

12. Describe any field campus or Environmental Education center used in your program(s):

The Barnebey Center for Environmental Studies 42 miles from the main campus is administered by the School of Natural Resources. It is 1320 acres of varied topography near glacial boundary and just inside the

Appalachian Plateau. It is used by several units of the University
for both resident courses and field trips.

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THE OHIO STATE UNIVERSITY NEWARK CAMPUS

1. Name of Contact Person, Title, Location, Mailing Address and Phone:

Dr. Lillabelle Holt

Assistant Professor, Early and Middle Childhood Education

The Ohio State University Newark Campus

University Drive

Newark, Ohio 43055

Phone:

2. Administrative Location:

College of Education

Early and Middle Childhood Education Department

3. Degree(s) Offered in Outdoor Education:

B.S. - Education (Elementary Education, K-8 - Concentration in Outdoor/
Environmental Education)

4. Total Number of Faculty, Full-time and Part-time:

Full-time: 3

Part-time: 2

5. Faculty Status and Education of Outdoor Education Faculty, Full-time
and Part-time:

Full-time:

Holt, Lillabelle

B.S. - Ohio University (Elementary Education)

M.A. - Ohio University (Elementary Education)

Ph.D. - Ohio University (Outdoor/Environmental Education - Elementary Education)

--Phelps, Sewall

Ph.D. - Wayne State University (Teacher Education)

--Mahieu, Patricia

Ph.D. - Wayne State University (Elementary Education)

Part-time:

Varies with quarter offerings.

6. Date Department Founded and Date Degree Program(s) Founded in Outdoor Education:

1970 - Early and Middle Childhood Education Department

1973 - B.S. - Education (Concentration in Outdoor/Environmental Education)

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

B.S. - Education - 196 quarter hours

Concentration in Outdoor/Environmental Education - 40 quarter hours

Related science and other courses - 34 quarter hours

8. Outdoor Education Course Titles and Descriptions:

Environmental Education is the structural theme of the entire four-degree program in elementary education at the Newark Campus. This "alternative program" has been approved by the Ohio State University, College of Education.

All professional courses, including the "methods" courses, emphasize content and techniques of environmental education, and utilize alternative learning environments.

Student teaching experience (one ten-week quarter) includes an outdoor/ environmental education assignment.

A summer workshop (two weeks, all day) provides for a concentrated study of outdoor/environmental educational programs and includes direct experience in a variety of learning environments, the construction of outdoor learning devices, and an examination of related research and publications.

9. Total Number of Students Graduated to Date in Outdoor Education Program(s)

92 B.S. - Education (Elementary Education, K-8 - Concentration in Outdoor/Environmental Education)

10. Approximate Number of Total Students in Various Degree Programs and Percentage of Those Students in Outdoor Education Program(s):

950 B.S. - Education

64 B.S. - Education (Concentration in Outdoor/Environmental Education)

15% % of Student Enrollment in Outdoor Education Program(s)

11. Future Developments:

It is anticipated that this program will expand in the future, building upon the interests of faculty, the variety of resources for outdoor/ environmental education learning, and the need of teachers with environmental education training. This program is being developed in cooperation with the area school systems: Newark City Schools, Heath City Schools, Granville Schools, and the Licking County Schools. Their outdoor/environmental education programs provide laboratory experiences for the university students every quarter a student is enrolled in an education course.

12. Describe any field campus or Environmental Education center used in your program(s):

The Newark Campus Nature Trail is a training facility on the campus property. In addition, faculty utilize Daves Arboretum, Camp Ohio, Camp Nelson Dodd, and alternative environments (downtown public square, cemeteries, parking lots, vacant lots, urban blocks, etc.).

OKLAHOMA STATE UNIVERSITY

1. Name of Contact Person, Title, Location, Mailing Address and Phone:

Dr. Terence J. Mills

Associate Professor, Science Education

Department of Curriculum and Instruction

Oklahoma State University

Stillwater, Oklahoma 74074

Phone: 405/624-7129

2. Administrative Location:

College of Education

Department of Curriculum and Instruction

Science Education Center

3. Degree(s) Offered in Outdoor Education:

M.A. - Curriculum and Instruction (Concentration in Multidisciplinary
Outdoor-Environmental Education)

Ed.D. - Curriculum and Instruction (Concentration in Multidisciplinary
Outdoor-Environmental Education)

4. Total Number of Faculty, Full-time and Part-time:

Half-time: 3

5. Faculty Status and Education of Outdoor Education Faculty, Full-time
and Part-time:

Mills, Terence J.

B.S. - Western Illinois University (Biology)

M.S. - Western Illinois University (School Administration)

Ed.D. - Indiana University (Science Education)

--Johnsten, Thomas D.

B.S. - Kansas State Teachers College (Biology)

M.S. - Fort Hays Kansas State College (Botany)

Ed.D. - University of Nebraska (Science Education)

--Wiggins, Kenneth

B.S. - Troy State University (Science & Mathematics)

M.S. - Auburn University (Science Education)

Ed.D. - Auburn University (Curriculum and Instruction)

6. Date Department Founded and Date Degree Program(s) Founded in Outdoor Education:

1975 - Department of Curriculum and Instruction

1974 - Concentration in Multidisciplinary Outdoor-Environmental Education

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

-M.A. - Curriculum and Instruction

Plan I - 24 hours and 6 hours thesis

Plan II - 30 hours and 2 hours report

Plan III - 36 hours and creative component

-Concentration in Multidisciplinary Outdoor-Environmental Education

Plan I - 12 hours and related thesis

Plan II - 18 hours and related report

Plan III - 24 hours and related creative component

-Ed.D. - Curriculum and Instruction - 95 hours above B.S. (Concentration in Multidisciplinary Outdoor-Environmental Education - 24 hours plus 12 related cognate.

8. Outdoor Education Course Titles Descriptions:

Developing Competencies in Outdoor Education: A multidisciplinary approach to environmental awareness through the development and use of outdoor classrooms.

Science Education Workshop: The analysis of contemporary environmental and conservation education curricula organization, teaching strategies, philosophy, and learning theory. Practical experience with curricula materials is stressed.

Camp Administration and Programming: The design, organization, and administration of various types of outdoor camp facilities.

Seminar in Science Education: An examination of problems, trends, and issues in science education. Focus can be either at the pre-service or in-service level.

Environmental Processes and Strategies: Multidisciplinary examination of the structure, fundamental problems. Team taught by faculty from biology, physics, and social science.

Principles of Wildlife Ecology: The application of ecological principles to the production-control of natural population.

Problems in Wildlife Ecology: An introduction to field experience in problem identification, data collection, analysis, and interpretation, and report preparation.

Environmental Problem Analysis: Multidisciplinary team investigation of environmental problems. Problem formulation review of applicable theory from different disciplines, data collection from field, library and laboratory, mathematical modeling, and application of appropriate technique of analysis to selected environmental problems.

Plant Ecology: The relationship of plant and other organisms to each other and to their physical environment. Field trip included.

Conservation of Natural Resources: Problems and corrective methods of conservation of land, water, forests, wildlife, minerals, and people.

Topics in Technology & Society: Selected topics relating technology to the problems of society and to their solution. Relies minimally on mathematics and is prepared for participation by non-engineering students.

General Ecology: Physical and biological environments, responses of organisms to the environment, community ecology, natural ecosystems, and man's interaction with ecology.

Legal Problems of the International Environment: A case study of diverse areas in which international law finds applicability, with special emphasis on problems of territorial jurisdiction: continental shelves, straits, canals, and international river systems. Maritime law, national and outer space law, and the international law of population.

International Problems and the Role of the School: The study of the school and its relationship to existing international concerns in other types of societies. Investigation of international problems such as natural resources, environment, food supply, urbanization and conflict resolution.

Administrative and Environmental Law: Legal powers, limits, procedures of administration agencies, with emphasis upon regulation of the environment.

9. Total Number of Students Graduated to Date in Outdoor Education Program(s):

8 M.A. - Curriculum and Instruction (Concentration in Multidisciplinary Outdoor-Environmental Education)

0 Ed.D - Curriculum and Instruction (Concentration in Multidisciplinary Outdoor-Environmental Education)

10. Approximate Number of Total Students in Various Degree Programs and Percentage of Those Students in Outdoor Education Program(s):

105 M.A. - Curriculum and Instruction

4% % Student Enrollment in Outdoor-Environmental Education

11. Future Developments:

In cooperation with the Oklahoma Conservation Commission, scholarships are offered to teachers to attend Outdoor-Environmental Education Programs at Oklahoma State University. The Oklahoma State University Environmental Research Station is being used as a site for Outdoor Education in the public schools. The public school program "Adventures Beyond the Classroom" is the nucleus for teacher training at the undergraduate program. Summer activities include a 4 week, 7 hour graduate credit, Outdoor-Environmental Education Program for public school teachers and administrators, as well as special programs involving issues in the energy crisis, and environmental curricula workshops. Other summer outdoor education workshops are held at the Oklahoma State University Geology Field Camp, Canon City, Colorado.

12. Describe any field campus or Environmental Education center used in your program(s):

Oklahoma State University owns Lake Carl Blackwell located 8 miles from campus. Camp Redlands near the lake is used as a training site and Outdoor-Environmental Education Center. Cabins, cafeteria, swimming, boating, etc., are available.

In addition, Oklahoma maintains the Oklahoma Geology Field Camp near Canon City, Colorado. Two week summer Outdoor-Environmental Education Workshops are held at the center for teachers and administrators.

SOUTHWESTERN OKLAHOMA STATE UNIVERSITY

1. Name of Contact Person, Title, Location, Mailing Address and

Phone:

Dr. L. J. Van Horn

Departmental Chairman

Department of Health, Physical Education and Recreation

Southwestern Oklahoma State University

Weatherford, Oklahoma 73096

2. Administrative Location:

School of Health, Physical Education and Recreation

3. Degree(s) Offered in Outdoor Education:

B. S. Ed. - Health, Physical Education and Recreation (Emphasis in Outdoor Education)

B. A. - Recreation (Emphasis in Outdoor Education)

M. Ed. - Emphasis in Outdoor Education

4. Total Number of Faculty, Full-time and Part-time:

Full-time: 0

Part-time: 4

5. Faculty Status and Education in Outdoor Education Faculty, Full-time and Part-time:

Van Horn, L. J., Departmental Chairman

--Hundley, Charles, Outdoor Education Staff

Specialist in Hunting Safety

--Ross, Ken, Aquatic Director & Outdoor Education Staff

6. Date Department Founded and Date Degree Program(s) Founded in

Outdoor Education:

1958 - Outdoor Education Program

1970 - B. A. - Recreation (Emphasis in Outdoor Education)

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

B. S. Ed. - Health, Physical Education and Recreation (Emphasis in Outdoor Education) - 124 semester hours

B. A. - Recreation (Emphasis in Outdoor Education) - 124 semester hours

M. Ed. - Emphasis in Outdoor Education - 32 semester hours

Emphasis in Outdoor Education - 20 semester hours

8. Outdoor Education Course Titles and Descriptions:

Basic Scuba: Designed to meet and surpass minimum requirements as set forth by the YMCA, PADI, and AAHPER.

Advanced Scuba: Designed to meet and surpass minimum requirements as set forth by the YMCA, PADI, and other aquatics areas of research.

Assistant Instructor's Institute in Scuba: (YMCA Certified)
Designed to meet and surpass minimum requirements set forth by the YMCA.

Scuba Instructor's Institute in Scuba Diving Certification:
Designed to meet and surpass minimum requirements set by the YMCA.
Certified through YMCA, Southwest Region.

Outdoor Education Short Course - God and His Great Outdoors:

Designed to give the student a brief exposure to several areas of outdoor education and camp crafts. At the same time, safety in outdoor pursuits is emphasized to the extreme. This outdoor education short course is an experience in human relations that one cannot walk away from without feeling better about his fellow man. Areas of exposure are archery, sailing, canoeing, hunter's safety, trapshooting, environmental appreciation, marlen spike seamanship, hiking and demonstrations with limited participation in rappelling and scuba diving for those interested.

Outdoor Education - Golf Clinic: An effort to upgrade the teaching and coaching skills of golf, one of the nation's fastest growing sports. The beautiful 18 hole Weatherford Golf Course will host the clinic. All participants will be broken down into three skills areas (advanced, intermediate, and beginning-beginners). Handicap golfers are asked to bring their Da-Con cards, as competition will be an essential part of the clinic. Clubs and practice balls will be provided where necessary. The Weatherford course has an excellent practice area and a new clubhouse which will be used for class sessions, group discussions and films.

Water Safety - Sailing & Canoeing: Designed to cover the elementary level of sailing and canoeing skills with emphasis on safety.

Elementary Archery: First course in archery.

Water Safety and Life Saving: This course leads to completion of the requirements for American Red Cross Certificates in Senior Life Saving and Water Safety Instructor.

Trapshooting: An elementary course in the skills and practice of trapshooting.

Elementary Golf: Beginning course in golf.

Intermediate Golf: Second course in golf.

Recreational Leadership: Organization and Leadership of recreational activities for youth groups.

Seminar in Health, Physical Education and Recreation (Topic): Group study of specified topic in health, physical education and recreation for undergraduate students.

Community Recreation: Instruction in methods and materials in community recreation leadership. Emphasis is placed on outdoor recreation education.

Camp Counseling: A study of methods and content of camping and outdoor recreation programs. Emphasis placed on participation in activities such as: sailing, canoeing, aquatics, rappelling, campcrafts, environmental appreciation, animal and plant investigation, and human relations.

Organization and Administration of Outdoor Recreation: To develop the student, public administration concepts as related to outdoor recreation, thinking conceptually about recreation as a service and how it is delivered to the citizenry; the planning and budgeting for that service and creating of model public agencies delivering outdoor recreation.

Outdoor Leisure Education Seminar (Topic): Group study in assigned topic of outdoor leisure education. Basic outdoor skills and techniques with emphasis on outdoor living and camping.

Orientation to Outdoor Education (Topic): Group study in assigned topic of outdoor skills. Emphasis on sport skills of outdoor type, such as hunting, fishing, and boating safety.

Outdoor Education - Winter Sports, Skiing: This course is a basic first course in snow skiing. The course is conducted in Red River, New Mexico, in cooperation with professional ski instructors on the staff and with student instructors working in close cooperation.

9. Total Number of Students Graduated to Date in Outdoor Education Program(s):

10. Approximate Number of Total Students in Various Degree Programs and Percentage of Those Students in Outdoor Education Program(s):

200 B. S. Ed. - Health, Physical Education and Recreation (Emphasis in Outdoor Education)

80 B. A. - Recreation (Emphasis in Outdoor Education)

60 M. Ed. - Emphasis in Outdoor Education

11. Future Developments:

The University is constantly upgrading its outdoor education program. We are improving our scuba program and plan a trip in the near future to the Bahamas. We have just purchased a dive barge named the Southwestern Wind. We are adding a kayak aspect to our outdoor aquatics program.

12. Describe any field campus or Environmental Education center used in your program(s):

We work very closely with an individual in a lease agreement for a University Outdoor Education Lab. This includes a lake on which we sail, canoe, and camp.

SOUTHERN OREGON STATE COLLEGE

1. Name of Contact Person, Title, Location, Mailing Address and

Phone:

Dr. Ronald D. Lamb

Professor of Biology, Director of Outdoor Education

Southern Oregon State College

Ashland, Oregon 97520

Phone: 503/482-6341

2. Administrative Location:

Department of Biology

3. Degree(s) Offered in Outdoor Education:

M. S. - General Studies - Outdoor Education

4. Total Number of Faculty, Full-time and Part-time:

Full-time 45

Program is multidisciplinary and draws course work from several departments:

Biology - 14

Geography - 4

Education - 24

Geology - 3

During summer, there are 2 full-time in Outdoor Education

5. Faculty Status and Education of Outdoor Education Faculty, Full-time and Part-time:

Lamb, Ronald D.

B. S.-Southern Oregon College (Secondary Education - Biology)

M. S.-Southern Oregon College (Secondary Education - Biology)

M. S.-Oregon State University (General Science)

Ph. D.-Oregon State University (General Science)

--Mitchell, Donald - Associate Professor

B. S.-Southern Oregon College (Secondary Education - Biology)

M.S.-Washington State University (Science Education)

Ed. D.-Northern Colorado University (Science Education)

6. Date Department Founded and Date Degree Program(s) Founded in

Outdoor Education:

1969 - M. S. - General Studies

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

M. S. - 45 term hours (non-thesis)

12 hours in professional Outdoor Education

6 hours specified science requirement

Examples: Field Biology, Aquatic Ecology, Mammalogy

9 hours approved social science electives

Examples: Conservation in U. S., Field Geography

9 hours approved science electives

9 hours free electives

8. Outdoor Education Course Titles and Descriptions:

Outdoor Education and the School Curriculum: The techniques of using natural areas for classes in any subject where certain areas of knowledge may best be taught in an outdoor situation.

Outdoor Education and the School Curriculum - Practicum:

The time will be spent in working with children in outdoor teaching situations - on the school grounds, on field trips, and at the Outdoor School at Cascade Field Center.

Conservation Education: The basic principles of environmental conservation presented in the field by resource people from state and federal agencies, the development of teaching situations by which teachers and youth leaders may provide field work for their students.

Outdoor Education and the School Curriculum - Administration and Problems: A practical experience in administering a resident outdoor school at Cascade Field Center for elementary-aged students.

9. Total Number of Students Graduated to Date, in Outdoor Education Program(s):

65 M. S. - General Studies - Outdoor Education

10. Approximate Number of Total Students in Various Degree Programs and Percentage of Those Students in Outdoor Education Program(s):

32 M. S. - General Studies - Outdoor Education

11. Future Developments:

Continual expansion of M. S. program is anticipated along with further development of Cascade Field Center.

12. Describe any field campus or Environmental Education center used in your program(s):

During the summer, the professional core courses are taught at Cascade Field Center, a 17 acre site located at Fish Lake in the Cascade Mountains. The site is leased on a long-term basis from the U. S. Forest Service. The heavily forested region around Fish Lake and the volcanic peaks nearby provide a wide range of natural areas where teachers may gain experience in the use of outdoor laboratories in teaching mathematics, science, geography, history, the language arts, and the fine arts.

UNIVERSITY OF OREGON

1. Name of Contact Person, Title, Location, Mailing Address and Phone:

Dr. Phyllis M. Ford

Professor and Graduate Coordinator

Department of Recreation and Park Management

University of Oregon.

Eugene, Oregon 97405.

Phone: 503/686-3396

2. Administrative Location:

College of Health, Physical Education, Recreation and Dance

3. Degree(s) Offered in Outdoor Education:

B.S. - Recreation and Park Management (Concentration in Outdoor Education)

B.S. - Education (Concentration in Outdoor Education)

M.S. - Recreation and Park Management (Concentration in Outdoor Education)

Ph.D. - Recreation and Park Management (Concentration in Outdoor Education)

4. Total Number of Faculty, Full-time and Part-time:

Full-time: 8

Part-time: 3

5. Faculty Status and Education of Outdoor Education Faculty, Full-time and Part-time:

Full-time:

Ford, Phyllis M., Professor

B. S.-University of Massachusetts (Nature Recreation)

M. A.-Arizona State University at Tempe (Education)

Re. D.-Indiana University (Recreation)

6. Date Department Founded and Date Degree Program(s) Founded in
Outdoor Education:

1956 - Department of Recreation and Park Management

1961 - B. S. - Recreation and Park Management (Concentration in
Outdoor Education)

1961 - M. S. - Recreation and Park Management (Concentration in
Outdoor Education)

1961 - Ph. D. - Recreation and Park Management (Concentration in
Outdoor Education)

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

B. S. - Recreation and Park Management (Concentration in Outdoor
Education) - 186 term hours

M. S. - Recreation and Park Management (Concentration in Outdoor
Education) - 45 term hours

Ph. D./Ed. D. - Recreation and Park Management (Concentration in
Outdoor Education) - 120 term hours

8. Outdoor Education Course Titles and Descriptions:

Principles of Outdoor Education: Development of outdoor
education and school camping; theories; practices, educational
significance; organization, administration, and program planning.

Recreation and Natural Resources: Administration of
natural resources at the national, state, local, and private

levels, with emphasis on the understanding of how outdoor recreation affects and is affected by the resources and the management philosophy and policies of the management agencies.

Environmental Interpretation: Methods and materials in interpreting natural resources to the general public. Designed for the students in park planning, outdoor recreation, and resource management.

Practicum: 1-15 credits.

Problems of Camp Management: Analysis of problems under various types of camp sponsorship; principles, techniques, resources, administrative practices; principles and problems of leadership and group behavior.

Camp Administration: Selected organizational and administrative aspects of organized camping including: site development, personnel, health, safety, sanitation, programs, finance, and public relations; emphasis on national standards and local regulations.

Special Problems: Credit hours to be arranged. Study of selected problems in recreation.

9. Total Number of Students Graduated to Date in Outdoor Education Program(s):
No statistics kept on majors in various, specific concentrations.
10. Approximate Number of Total Students in Various Degree Programs and Percentage of Those Students in Outdoor Education Program(s):

- 100 B. S. - Recreation and Park Management
- 50 M. S. - Recreation and Park Management
- 5 Ph. D./Ed. D. - Recreation and Park Management

11. Future Developments:

12. Describe any field campus or Environmental Education center used in your program(s):

The University of Oregon Recreation and Park Management Department utilizes facilities and lands owned by the U. S. Forest Service, Bureau of Land Management, private timber companies, youth agencies, private camps, and counties and municipalities.

CALIFORNIA STATE COLLEGE

1. Name of Contact Person, Title, Location, Mailing Address and

Phone:

Dr. Jess A. Cignetti

Professor of Physical Science/Director of Environmental Education

New Science Building

California State College

California, Pennsylvania 15419

Phone: 412/938-4156 or 4147

2. Administrative Location:

School of Education: Department of Physical Science

3. Degree(s) Offered in Outdoor Education:

Endorsement to Certification in Environmental Education (K-12)

4. Total Number of Faculty, Full-time and Part-time:

Full-time: 0

Part-time: 8

5. Faculty Status and Education of Outdoor Education Faculty, Full-time and Part-time:

Full-time:

None

Part-time:

Cignetti, J. A. - Professor; Director of Environmental Education

B. S.-Slippery Rock State College

M. S.-Duquesne University
 Ph. D.-The Ohio State University (Science Education/Physical Sciences)

--Catalano, R. - Associate Professor
 B. S.-Edinboro State College (Biology)

M. Ed.-Indiana University of Pennsylvania (Biology)
 Ph. D.-Brigham Young (Zoology)

--Craig, J. T. - Professor
 B. S.-West Virginia Wesleyan (Chemistry)
 M. Litt.-University of Pittsburgh (Chemistry)
 Ph. D.-Louisiana State University (Chemistry)

--Moon, T. C. - Professor
 A. B.-Kalamazoo College (Biology)
 M. A. T.-Oberlin (Biology/Education)
 Ph. D.-Michigan State University (Science Education/Biology)

--Mullins, J. - Assistant Professor
 B. A.-Wayne State (Biology)
 M. S.-Wayne State (Plant Taxonomy)
 Ph. D.-North Dakota State (Physiology/Ecology)

--Hunter, B. - Professor
 B. S.-California State College (Biology)
 M. S.-University of Minnesota (Plant Pathology)
 Ph. D.-West Virginia University (Plant Pathology)

--Bailey, M. - Associate Professor
 B. S.-California State College (Biology)
 M. Ed.-Rutgers (Biology)

6. Date Department Founded and Date Degree Program(s) Founded in
Outdoor Education:

1973 - Environmental Education

Endorsement to Certificate in Environmental Education (K-12)

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

-B. S. - Elementary or Secondary Education - 128 credit hours

-Endorsement to Certification - 22-24 credit hours plus 10 hours
of Related Cognate

-Related Cognate in Natural Science - 10 credit hours

8. Outdoor Education Course Titles and Descriptions:

Man and the Environment: Exposure of the students to the broad field of Environmental Management, both good and bad examples. No one area will be covered in depth. Rather, the student will be introduced to each problem, its source, current corrective measures, and possible future technology.

Environmental Chemistry: Study of a number of the most significant factors in the relevance of science and the chemical environment in which people live.

Environmental Biology: The interrelationships of various plants and animals will be studied as they relate to the biotic and abiotic constituents of diverse terrestrial and aquatic habitats.

Environmental Geology: Deals with the interaction between man and his geologic environment. Topics include erosion, floods, sediments and pollutants, health hazards, soils,

earthquakes, mass movements, volcanoes and urban environmental problems. Each student will also satisfactorily complete at least one experience in each of the following areas described below:

- a. Laboratory Science - Example: Introduction to Biology
Physical Science
- b. Techniques and Procedures - Example: Field Science
for Teachers
- c. Outdoor Activities - Example: Conservation of Bio-
logical Resources Environmental Interpretation
- d. Human Involvement - Example: Energy Power Seminar -
Human Ecology

9. Total Number of Students Graduated to Date in Outdoor Education
Program(s):

90 Endorsement to Certification in Environmental Education (K-12)

10. Approximate Number of Total Students in Various Degree Programs
and Percentage of Those Students in Outdoor Education Program(s):

Presently does not have a B. S. program.

11. Future Developments:

The California State College-California, Pennsylvania, Environmental Education Steering Committee is continually attempting to improve the program in Environmental Education. The Marine Science Consortium, Wallops Island, Virginia, serves as a Marine Science Field Station for all Environmental Education students, while the I. W. McKeener Field Station in northern Pennsylvania

is also utilized. A full B. S. program along with a graduate program in Environmental Education and the addition of faculty and facilities are envisioned for the near future.

12. Describe any field campus or Environmental Education center used in your program(s):

California State College owns a tract of land known as the "School Farm." Much of this land is maintained for outdoor camping and nature studies in Environmental Education. This land is within 2 miles of the college. California State also has the following facilities for student use,

- a. Marine Science Consortium, Wallops Island, Virginia
- b. Ivan McKeener Environmental Center, Sandy Lake, Pennsylvania
- c. Jumonville Training Facility, 25 miles from campus
- d. Washington County Parks (Ex-Mingo Creek Park)
- e. Elizabeth Forward School District Environmental Site

KUTZTOWN STATE COLLEGE

1. Name of Contact Person, Title, Location, Mailing Address and Phone:
Dr. B. Henry Shafer
Associate Dean of Education
Kutztown State College
Kutztown, Pennsylvania 19530
Phone: 215/683-3511, Ext. 414
2. Administrative Location:
School of Education
3. Degree(s) Offered in Outdoor Education:
B. S. - Education (Endorsement in Environmental Education)
4. Total Number of Faculty, Full-time and Part-time:
Full-time: 0
Part-time: 6
5. Faculty Status and Education of Outdoor Education Faculty, Full-time and Part-time:
Gundy, Samuel C., Assistant Professor in Biological Sciences
B. S.-Kutztown State College
M. S.-Cornell University
--Hinker, Daniel J., Associate Professor in Education
B. S.-Lock Haven State College
M. S.-Bucknell University

--Rhein, Ronald R., Associate Professor in Biological Sciences

B. S.-Kutztown State College

M. S.-Pennsylvania State University

--Slick, Max H., Professor of Geography

B. S.-Pennsylvania State University

M. S.-Northwestern University

Ph. D.-Pennsylvania State University

--Marple, Charles E., Associate Professor of Education

B. S.-Muhlenberg College

M. Ed.-Lehigh University

Ed. D.-Lehigh University

--Duddy, Patrick J., Associate Professor in Biological Sciences

B. S.-University of Notre Dame

M. S.-Villanova University

M. A.-Lehigh University

M. Ed.-Kutztown State College

6. Date Department Founded and Date Degree Program(s) Founded in

Outdoor Education:

1928 - School of Education

1975 - Endorsement Program in Environmental Education

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

-B. S. - Education - 128 semester hours

-Endorsement in Environmental Education - 18 credit hours

8. Outdoor Education Course Titles and Descriptions:

Conservation in Natural Resources: This course offers an opportunity to analyze current problems growing out of the distribution and utilization of our physical and cultural environments. Emphasis is placed upon suggested methods which enable man to live in harmony with his environment and reduce waste to a minimum.

Man and His Environment: A detailed analysis of man's interrelationships with other organisms and his environment -- a course in Human Ecology. The deterioration of the ecosystem will be studied from the past, present, and future influences of man. Population dynamics, environmental deterioration, ecosystems and man's interaction with his environment will be major topics.

Natural History: An introduction to natural history with emphasis on the vertebrates (exclusive of birds). Taxonomic and ecological aspects with emphasis on local organisms will be considered. Minerals, fossils, insects, and certain plants will be reviewed through study specimens and field collecting.

Organization and Administration of Environmental Education: This course is designed to integrate concepts, skills, and practices in environmental study so that the prospective or in-service teacher can assume a leadership role in school programs of environmental education. Development of curriculum and establishment and operation of outdoor sites will be considered. Supervised experience in operational programs will be provided.

Field Methods in Geography: The field course in geography will stress various field techniques to provide an insight into

the broad geographical concepts and processes. The student will learn to observe, measure, record, and analyze phenomena on the earth's surface.

9. Total Number of Students Graduated to Date in Outdoor Education Program(s):

4 B. S. - Education (Endorsement in Environmental Education)

10. Approximate Number of Total Students in Various Degree Programs and Percentage of Those Students in Outdoor Education Program(s):

1790 B. S. - Education

197 B. S. - Education (Endorsement in Environmental Education)

1.1% % of Student Enrollment in Outdoor Education Program(s)

11. Future Developments:

An Advisory Committee, composed of environmentalists in schools and other agencies beyond the college, plus college personnel, is planning to publicize the program and to sponsor a conference to attract more individuals -- both graduate and undergraduate -- into the program.

12. Describe any field campus or Environmental Education center used in your program(s):

The college owns a farm which holds great promise for utilization in outdoor/environmental activities. The Nolde Forest Environmental Education Center (a state-supported facility) and the Hawk Mountain Sanctuary (non-governmental) are in the immediate environs of the college and provide excellent sites for field experiences in environmental education.

MERCYHURST COLLEGE

1. Name of Contact Person, Title, Location, Mailing Address and

Phone:

Sister Maura Smith

Director of Environmental Studies

Mercyhurst College

Erie, Pennsylvania 16501

Phone: 814/864-0681

2. Administrative Location:

Mercyhurst College

3. Degree(s) Offered in Outdoor Education:

B. A. - Environmental Studies (Environmental Education Endorsement Program)

4. Total Number of Faculty, Full-time and Part-time:

Full-time: 1

Part-time: 3

5. Faculty Status and Education of Outdoor Education Faculty, Full-time and Part-time:

Full-time:

Smith, Sister Maura, Professor

B. A.-Mercyhurst College (Biology)

M. S.-Catholic University of America (Biology)

Ed. D.-University of Florida (Curriculum and Instruction-Science Education)

6. Date Department Founded and Date Degree Program(s) Founded in

Outdoor Education:

1973 - Environmental Studies Department

1973 - Environmental Education Endorsement Program

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

B. A. - Environmental Studies - 40 courses

Environmental Education Endorsement Program - 24 credits plus
15 credits in Education cognate

8. Outdoor Education Course Titles and Descriptions:

Environmental Techniques: A field course which introduces the basic equipment and techniques for sampling and analyzing the components of ecosystems.

Urban Environment: A study of the special environmental aspects of the city; the problems and possible solutions.

Special emphasis will be placed on land use planning, housing, recreation, new towns, urban redevelopment and transportation.

Wildlife Management: A course designed to explore the various eras in American wildlife management. An in-depth analysis will be made of habitat and modern wildlife land management techniques. Special emphasis will be placed on birds, mammals and reptiles found in Pennsylvania.

Environmental Education: This course is designed to examine environmental curricula and instructional techniques K-12. Opportunity for teaching environmental topics to students K-12.

Outdoor Education and Recreation: Exploration of the methods and techniques for using the outdoors as an environmental classroom. Field studies and weekend camping trips will be required for this course. Recommended for those seeking Environmental Education endorsement.

Creativity and the Environment: This course examines the environment using varied creative approaches. Students will explore the environment in personally meaningful ways and share their encounters and insights with others.

Environmental Impact: An in-depth study of a local land use problem. Students will use the systematic, interdisciplinary approach developed by various governmental and research agencies to forecast man's impact on the environment.

Environmental Seminar: The seminar is designed to offer the opportunity for in-depth analysis of environmental topics on the local, national and global level. Students will present weekly oral reports on their readings and prepare a research paper.

Environmental Practicum: The student designs and executes an experiential project under the direction of or in cooperation with an agency or professional in a pertinent environmentally related field.

This practicum constitutes one course.

Environmental Internship: This course is designed to enable the student to have an on-the-job learning experience with an agency or a professional in an environmentally related field.

This is a full-time program for one term and constitutes two courses.

Any student who earns Pennsylvania teaching certification in any major area of concentration may earn Environmental Education Endorsement. To do this the student must demonstrate competence in the area of Environmental Studies and fulfill certain state requirements. Ordinarily a student earns this endorsement by successfully completing certain course work in Environmental Studies including: The Environment, Environmental Problems, Conservation, and Environmental Geology. Other courses are strongly recommended.

9. Total Number of Students Graduated to Date in Outdoor Education

Program(s):

8 B. A. - Environmental Studies

3 Environmental Education Endorsement Program

10. Approximate Number of Total Students in Various Degree Programs and Percentage of Those Students in Outdoor Education Program(s):

30 B. A. - Environmental Studies (Environmental Education Endorsement Program)

2.5% % of Student Enrollment in Outdoor Education Program(s)

11. Future Developments:

The Environmental Studies Department of Mercyhurst College is strengthening its interdisciplinary thrust by developing cooperative programs with the Intercultural Studies Department and the Housing and Dining section of the Home Economics Department.

A feasibility study is being initiated concerning the development of a master's level program in Environmental Education.

12. Describe any field campus or Environmental Education center used in your program(s):

Mercyhurst has been developing a 15 acre site on campus for outdoor study. In its fifth year of development, the site offers the opportunity to study pond, swamp and meadow ecosystems.

Trees native to Pennsylvania are being planted in one section.

This site is ideal for studying succession in ecosystems.

Presque Isle peninsula, a large bird's head spit; extensive game

lands and bogs and numerous creeks of the Lake Erie watershed

are within a ten mile radius of the campus and all are utilized

in course and project work.

THE PENNSYLVANIA STATE UNIVERSITY

1. Name of Contact Person, Title, Location, Mailing Address and Phone:

Dr. Betty van der Smissen

Professor of Recreation and Coordinator of Outdoor-related
Recreation Areas

Recreation and Parks Program

College of Health, Physical Education and Recreation

The Pennsylvania State University

267 Recreation Building

University Park, Pennsylvania 16802

Phone: 814/865-1851

2. Administrative Location:

College of Health, Physical Education and Recreation

3. Degree(s) Offered in Outdoor Education:

B.S. - Recreation and Parks (Option in Interpretive Services or
Outdoor Education)

M.S. - Recreation and Parks (Specialization in Interpretive
Services, Outdoor Education, or Camping and Outing Sports)

Ph.D. - Physical Education (Emphasis in Interpretive Services,
Outdoor Education, or Camping and Outing Sports)

D.Ed. - Physical Education (Emphasis in Interpretive Services,
Outdoor Education, or Camping and Outing Sports)

The Commonwealth of Pennsylvania provides for an Endorsement
in Environmental Education to any valid teaching certificate.
At Penn State this program is administered by a five-person

steering committee with representatives from the College of Education, College of Agriculture, and College of Health, Physical Education and Recreation. The Endorsement (K-12) requires competencies in five areas: Methods and Materials, Natural and Environmental Sciences, Ecology, Conservation, Environmental Management and Utilization.

4. Total Number of Faculty, Full-time and Part-time:

Full-time: . 12

5. Faculty Status and Education of Outdoor Education Faculty, Full-time and Part-time:

Brookhiser, Judy K. - Instructor

B. S.-Western Illinois University (Physical Education)

--Christiansen, Monty L. - Associate Professor

B. S. L. A.-Iowa State University (Landscape Architecture)

M. L. A.-Iowa State University (Landscape Architecture)

--Elliott, Jerold E. - Associate Professor

B. S.-Kent State University (Industrial Arts and Math)

M. A.-Kent State University (Industrial Arts and Guidance)

Re. D.-Indiana University (Recreation)

--Gregory, Charles A. - Instructor

A. B.-Indiana University (Zoology)

M. S.-Indiana University (Recreation)

--Jarrell, Donald - Instructor

B. S.-California State College, Hayward (Recreation)

M. S.-The Pennsylvania State University (Recreation and Parks)

B.S. - Virginia Commonwealth University (Biology)

M.S. - The Pennsylvania State University (Recreation and Parks)

--Knopf, Richard C. - Assistant Professor

B.S. - The University of Michigan (Forestry)

M.S. - The University of Michigan (Resource Planning and Conservation)

Ph.D. - The University of Michigan (Natural Resources - Recreation Behavior)

--Myers, Judith L. - Instructor

B.A. - Carlton College (Sociology)

M.S. - George Williams College (Camping and Outdoor Education)

Ph.D. - The Pennsylvania State University (Recreation and Parks)

--Potter, Gerald R. - Instructor

B.S. - Illinois Wesleyan University (Physical Education)

M.S. - University of Illinois (Outdoor Recreation/Outdoor Education)

--Roth, Dale M. - Instructor

B.S. - The Pennsylvania State University (Horticulture)

M.S. - The Pennsylvania State University (Recreation and Parks)

--van der Smitten, Betty - Professor

A.B. - University of Kansas (Law)

J.D. - University of Kansas (Law)

M.S. - Indiana University (Recreation)

Re.D. - Indiana University (Recreation)

--Willson, Thomas E. - Instructor

B.S. - Baldwin-Wallace College (Elementary Education)

M.Ed. - Miami University (Curriculum and Supervision)

M.A. - Montclair State College (Outdoor Recreation and Conservation)

6. Date Department Founded and Date Degree Program(s) Founded in
Outdoor Education:

Recreation as a major program was established in 1946, undergraduate, and in 1949, graduate. Camping and outdoor education was a part of this curriculum from the beginning. In 1951, 100 acres were leased to serve as a laboratory, and in 1955 the first resident outdoor education program was held at Stone Valley Recreation Area.

--With curriculum revision in 1966, specific areas were designated, including as one of three "Interpretive Services and Outdoor Education, Camping and Outing Sports."

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

B. S. - Recreation and Parks - 132 credit hours (semester)

General Education - 52-54 credits

Recreation and Parks Professional Core - 30-38 credits
(Includes 6-14 credits of field experiences and maximum of 10 credit skills)

Outdoor-related Recreation Option - 42-51 credits
(Includes 12-15 credits Outdoor-oriented Recreation and Parks courses; 15-24 credits in environmental studies; up to 15 credits in related studies)

M. S. - Recreation and Parks (Specialization in Interpretive Services, Outdoor Education, or Camping and Outing Sports) - 30 credits

(Including thesis)

D.Ed. - Physical Education (Emphasis in Interpretive Services, Outdoor Education, or Camping and Outing Sports) - 90 credits

Ph.D. - Physical Education (Emphasis in Interpretive Services, Outdoor Education, or Camping and Outing Sports) - no set number of credits

8. Outdoor Education Course Titles and Descriptions:

Aquatic Small Craft: The American Red Cross canoeing and sailing program; prepares student to apply for Red Cross Smallcraft certification.

Interpretive Materials Laboratory: Selection and utilization of specialized equipment and graphic techniques for the preparation of interpretive materials, displays and presentations.

Outdoor Living Skills: Direct experience with outdoor living skills and backpacking; weekend campout. American Camping Association's Advance Campcraft certification skills covered.

Camp Counseling: Counselor skills and responsibilities for the organized camp.

Outdoor Program Leadership: Planning and leadership of program activities specifically oriented to the outdoor environment with special emphasis on the organized camp settings.

Outdoor Recreation: Role of outdoor recreation in today's society recreation demand and supply analysis; government functions and policies; current issues.

Water-Oriented Outdoor Recreation: Role of water-oriented outdoor recreation in society; activities, resources, legal aspects, public and private involvement, recreational water quality concerns.

Interpretive Services: Interpretation of cultural and natural history through a variety of instructional techniques, using interpretive principles and tools.

Outdoor Recreation Program Services: Planning, organization and operation of programs in public and commercial outdoor recreation areas, and outing sports complexes.

Interpretive Planning: Understanding of planning process related to interpretive facilities, services, and programs; knowledge and skill for preparing pre-design working documents.

Outdoor Education: Methods and Materials: Basic concepts of environmental education integrated into the school curriculum utilizing school site outdoor laboratories and resident outdoor education programs.

Administration of Environmental Program Operations: Resident and non-resident environmental education and camp program administration. Adaptation of personnel management and support services to program development.

Seminar in Environmental Education Administrative Problems: Focus upon use of the outdoors by special groups in resident and non-resident settings.

Seminar in Curriculum, Supervision and Evaluation of Environmental Education Programs:

Behavioral Patterns of the Outdoor Recreationist: Patterns of time and space use; user characteristics; meaning of participation; facilitation of environment-use enhancement.

Public and Private Recreation Lands and Waters: Public and private roles and interactions, allocation of resources, use policies, open space concepts, private enterprise developments, legal controls.

Environmental Law: Legislative, judiciary, administrative processes-roles; citizen action; legal concepts, litigation and enforcement tactics for protection and enhancement of natural environment.

Conservation of Natural Resources: Exploitation, utilization, and conservation of natural resources; relationships between resources; integration of conservation education into public schools.

Field Natural History for Teachers: Ecologically-oriented field study course to provide teachers with basic knowledge of natural science resources in school environments.

Teaching of Conservation of Natural Resources in the Schools: Needs, purposes, principles, methods, materials, and techniques in teaching conservation of natural resources in the elementary schools; field work, laboratory, and lectures.

Teaching of Environmental Education in the Schools: Resources, techniques and rationale for use of the environment surrounding the school for implementation and enrichment of various curriculum areas.

Also, practicum, problems, seminars

9. Total Number of Students Graduated to Date in Outdoor Education Program(s):
- 200 B.S. - Recreation and Parks (Outdoor-related Recreation Option)
 - 49 M.S. - Recreation and Parks (Specialization in Interpretive Services, Outdoor Education, or Camping and Outing Sports)
 - 1 Doctoral Degree
10. Approximate Number of Total Students in Various Degree Programs and Percentage of Those Students in Outdoor Education Program(s):
- 550 B.S. - Recreation and Parks
 - 183 B.S. - Recreation and Parks (Option in Interpretive Services or Outdoor Education)
 - 33.3% % of Student Enrollment in Outdoor Education Program(s)
 - M.S. - Recreation and Parks

275

287

40 M.S. - Recreation and Parks (Specialization in Interpretive Services, Outdoor Education, or Camping and Outing Sports)

66% % of Student Enrollment in Outdoor Education Program(s)

11 Doctoral Candidates - Recreation and Parks

6 Doctoral Candidates - Recreation and Parks (Emphasis in Interpretive Services, Outdoor Education, or Camping and Outing Sports)

50% % of Student Enrollment in Outdoor Education Program(s)

11. Future Developments:

Continued development of the Outdoor School and other programs at the Stone Valley Outdoor Recreation area; particular emphasis upon the behavioral elements and meaning of the outdoor experience in terms of research; increasing experiential opportunities for both undergraduate and graduate students.

12. Describe any field campus or Environmental Education center used in your program(s):

The Stone Valley Recreation Area is operated year-round by the College of Health, Physical Education and Recreation, and has three resident facilities, a 72 acre lake and many acres of land.

The Outdoor School services approximately 1,500 school children from September to May in a five-day resident program. Approximately one-half of these children come from the local school district and the others from many other districts, both urban and rural. Primarily grades four through eight are serviced in both the public and parochial schools. Special groups are also involved in the program, including EMR, TMR, learning disabilities, emotionally disturbed, and gifted. In the summer a three-week cultural enrichment program is offered.

In addition to the teachers of various classes, high school students in alternative education programs and college students in various curricula are given opportunities for leadership in the programs.

Through the Shavers Creek Nature Center at the Stone Valley Recreation Area, schools are also serviced on a day basis, such as sugar bush trips. Special programs are also offered for the general public on weekends and full-time during the summer.

Workshops offered through Continuing Education Division are also held at the Stone Valley Recreation Area.

SHIPPENSBURG STATE COLLEGE

1. Name of Contact Person, Title, Location, Mailing Address and Phone:

Dr. Lloyd A. Trinklein
Coordinator of Environmental Education
Shippensburg State College
Shippensburg, Pennsylvania 17257
Phone: 717/532-9121, Ext. 424

2. Administrative Location:

School of Education

3. Degree(s) Offered in Outdoor Education:

B.S. - Education (Endorsement in Environmental Education K-12)

4. Total Number of Faculty, Full-time and Part-time:

Because of the competence-based nature of the program, as many as twenty faculty members may be involved during any one academic year, and not necessarily the same twenty the next year.

5. Faculty Status and Education of Outdoor Education Faculty, Full-time and Part-time:

Full-time:

Trinklein, Lloyd A., Professor of Chemistry
B.S. - Central Michigan University (Secondary Education)
M.S. - University of Michigan (School for Teachers)
Ph.D. - Michigan State University (Science Education)

6. Date Department Founded and Date Degree Program(s) Founded in Outdoor Education:

1971 - B.S. - Education (Endorsement in Environmental Education K-12)

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

B.S. - Education - 128 semester hours

Endorsement in Environmental Education K-12 - 21 hours

8. Outdoor Education Course Titles and Descriptions:

Our program is a competency-based program. Therefore, we have only one course which is required for the endorsement. Students may meet the competencies by a variety of courses or other experiences, such as acting as a camp counselor or working with a district forester.

Environmental Education Practicum: This course affords students the opportunity to apply skills and knowledge gained in previous courses and other experiences to a practical situation. It also includes activities specifically designed to develop and evaluate skills that students need to create a course of study for teaching environmental education in the elementary and secondary schools. An integral part of this course is working with both secondary and elementary children in the application of both knowledge and skills.

9. Total Number of Students Graduated to Date in Outdoor Education Program(s)

37 B.S. - Education (Endorsement in Environmental Education K-12)

10. Approximate Number of Total Students in Outdoor Education Programs and Percentage of Those Students in Outdoor Education Program(s):

1150 B.S. - Education

75 B.S. - Education (Endorsement in Environmental Education K-12)

6.5% % of Student Enrollment in Outdoor Education Program(s)

279

291

11. Future Developments:

We are at the present working with several schools and with the Pennsylvania Bureau of State Parks to develop places where our students can be placed in a semi-intern situation to work with children in environmental education. This experience would become a portion of pre-service teachers' student teaching experience.

We are also developing a program for supervisors of environmental education. This new program would be a Masters Degree plus 15 semester credit hours certification program. It will also require an on-the-job internship.

12. Describe any field campus or Environmental Education center used in your program(s):

We have a rather large campus with several areas designated as field study areas, including a biological pond. We also have many State Park facilities within 20 miles of campus which are available to us for research and field study.

SLIPPERY ROCK COLLEGE

1. Name of Contact Person, Title, Location, Mailing Address and Phone:

Dr. Craig C. Chase

Professor - Environmental Education

Slippery Rock State College

Slippery Rock, Pennsylvania 16057

Phone: 412/794-2510

2. Administrative Location:

School of Health, Physical Education, Parks and Recreation

3. Degree(s) Offered in Outdoor Education:

B.A. - Concentration in Outdoor/Environmental Education

B.S. - Concentration in Outdoor/Environmental Education

M.Ed. - Concentration in Outdoor/Environmental Education

M.A. - Concentration in Outdoor/Environmental Education

4. Total Number of Faculty, Full-time and Part-time:

Full-time: 3

Part-time: 8

5. Faculty Status and Education of Outdoor Education Faculty, Full-time and Part-time:

Chase, Craig C. - Professor of Environmental Education

--Medve, Dr. Richard - Professor of Biology

--Shiner, Dr. James W. - Professor of Parks and Recreation

--Wilhelm, Dr. Eugene - Professor of Geography

6. Date Department Founded and Date Degree Program(s) Founded in Outdoor

Education:

1969 - Department of Recreation

1969 - B.A. - Concentration in Outdoor/Environmental Education

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

B.A. - Education - 120 credit hours

B.S. - Education - 120 credit hours

Concentration in Outdoor/Environmental Education - 18 credit hours
plus 18 hours cognate

Related cognate in Natural Sciences - 20 hours

8. Outdoor Education Course Titles and Descriptions:

Introduction to Environmental Problems: An introduction to some of the more crucial problems which arise from man's interaction with the natural environment, and the alternative solutions which are available.

Exploring our Environment: A basic course examining environmental components and their relationships.

Environmental Teaching: This course is a study of environmental education methodology and field experiences from a total environment perspective. Field trips required.

Environmental Education Administration and Planning: This course includes educational administration and curriculum development for environmental education programs; duties and responsibilities of an environmental education administrator; and the planning, development and operation of areas and facilities for environmental education. Field trips required.

7. Student Teaching: One-half of the student teaching experience will be accomplished in an environmental education experience and one-half will be in the student's major field.

9. Total Number of Students Graduated to Date in Outdoor Education Program(s):

37 B.A. - Concentration in Outdoor/Environmental Education

18 M.Ed.

10. Approximate Number of Total Students in Various Degree Programs and Percentage of Those Students in Outdoor Education Program(s):

48 B.A.

67 M.Ed.

11. Future Developments:

The graduate and undergraduate program in Environmental Education, defined by the college in terms of conservation/outdoor education, is now operating workshops for in-service teachers and administrators.

In the near future, the following will be offered:

- a. A four-year undergraduate degree in Environmental Education.
- b. A series of one-week experiences in U.S. Environmental Biological Instructional Strategies, and Values Clarification.
- c. A cooperative education program with the Corps of Engineers and National Park Service.
- d. The development of an Outdoor Instructional Laboratory.

12. Describe any field campus or Environmental Education center used in your program(s):

Slippery Rock State College operates a nature center and land laboratory owned by the Western Pennsylvania Conservancy. It has about 12,000 visitors per year. Students in the program assume all roles in public programs: publicity, funding, administration, presentations. This 300 acre facility is adjacent to the largest lake in Pennsylvania and the site of the Boy Scouts of America National Jamboree.

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TEMPLE UNIVERSITY

1. Name of Contact Person, Title, Location, Mailing Address and Phone:

Dr. Donald Humphreys

Associate Professor, Science Education

College of Education, Ritter Hall 347

Temple University

Philadelphia, Pennsylvania 19122

Phone: 215/787-6195

2. Administrative Location:

College of Education

3. Degree(s) Offered in Outdoor Education:

M.Ed. and Certification - Environmental Education

4. Total Number of Faculty, Full-time and Part-time:

Full-time: 1

Part-time: 1

5. Faculty Status and Education of Outdoor Education Faculty, Full-time and Part-time:

Humphreys, Donald W., Associate Professor

B.A. and M.A. - University of Northern Iowa (Biology)

Ph.D. - University of Iowa (Geology, Science Education)

6. Date Department Founded and Date Degree Program(s) Founded in Outdoor Education:

M.Ed. and Certification - Environmental Education

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

M.Ed. and Certification Endorsement - 30 semester hours

8. Outdoor Education Course Titles and Descriptions:

Environmental Science

Aquatic Biology

Tinicum Marsh

Ecology and Field Biology

9. Total Number of Students Graduated to Date in Outdoor Education

Programs(s):

New Program

10. Approximate Number of Total Students in Various Degree Programs and

Percentage of Those Students in Outdoor Education Program(s):

Not available

11. Future Developments:

12. Describe any field campus or Environmental Education center used in

your program(s):

Schuylkill Valley Nature Center

Tinicum Marsh Environmental Study Area

THIEL COLLEGE

1. Name of Contact Person, Title, Location, Mailing Address and Phone:

Dr. Al Smith

Supervisor of Environmental Education

Assistant Professor

Thiel College

Greenville, Pennsylvania 16125

Phone: 412/588-7700, ext. 205

2. Administrative Location:

Education Department

3. Degree(s) Offered in Outdoor Education:

B.A. - Environmental Studies (Certification in Environmental Education)

4. Total Number of Faculty, Full-time and Part-time:

Full-time: 5

5. Faculty Status and Education of Outdoor Education Faculty, Full-time and Part-time:

Full-time:

Smith, Al - Supervisor of Environmental Education; Assistant Professor

B.S. - Lock Haven State College (Secondary Education)

D.Ed. - Lock Haven State College (Science Education - Curriculum)

6. Date Department Founded and Date Degree Program(s) Founded in Outdoor Education:

1974 - Environmental Education

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

B.A. - Environmental Studies (Certification in Environmental Education)

Elementary - 129 hours

Secondary - 112 hours

8. Outdoor Education Course Titles and Descriptions:

Outdoor/Environmental Education: Emphasis on learning about the outdoors. Course work in map and compass, survival training, backpacking and equipment selection, diet requirements, field trips, skiing (down-hill and cross country), outdoor interpretation, art work, and icefishing. Special emphasis on preparation and leadership to prepare teachers at the elementary and secondary levels to teach courses in outdoor education. Study of the philosophical foundations, with an interdisciplinary approach to teaching in the outdoors.

9. Total Number of Students Graduated to Date in Outdoor Education Program(s)

2 B.A. - Environmental Studies (Certification in Environmental Education)

10. Approximate Number of Total Students in Various Degree Programs and Percentage of Those Students in Outdoor Education Program(s):

80 B.A. - Environmental Studies

8 B.A. - Environmental Studies (Certification in Environmental Education)

10% % of Student Enrollment in Outdoor Education Program(s)

11. Future Developments:

Expansion of program to utilize a local community outdoor nature center by the use of grants.

12. Describe any field campus or Environmental Education center used in
your program(s):

None

CLEMSON UNIVERSITY

1. Name of Contact Person, Title, Location, Mailing Address and Phone:

H. Jesse Grove

Associate Professor of Recreation and Park Administration

College of Forest and Recreation Resources

Clemson University

Clemson, South Carolina 29631

Phone: 803/656-3400

2. Administrative Location:

College of Forest and Recreation Resources

3. Degree(s) Offered in Outdoor Education:

B.S. - Recreation and Park Administration (Concentration in Resource Management)

M.S. - Recreation and Park Administration (Emphasis in Environmental Interpretation)

4. Total Number of Faculty, Full-time and Part-time:

Full-time: 14

Part-time: 3

5. Faculty Status and Education of Outdoor Education Faculty, Full-time and Part-time:

Full-time:

Grove, H. Jesse, Associate Professor

B.S. - The Pennsylvania State College (Recreation and Park Administration)

M.Ed. - The Pennsylvania State College (Recreation and Park Administration)

--Merrell, Edward A.

B.A. - University of South Alabama (Political Science)

M.R.P.A. - Clemson University (Emphasis in Environmental Interpretation)

6. Date Department Founded and Date Degree Program(s) Founded in Outdoor

Education:

1972 - B.S. - Recreation and Park Administration (Concentration in Resource Management)

1972 - M.S. - Recreation and Park Administration (Emphasis in Environmental Interpretation)

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

B.S. - Recreation and Park Administration - 135 semester hours

Concentration in Resource Management - 9 semester hours

Supportive Courses - 29 semester hours

M.S. - Recreation and Park Administration (Emphasis in Environmental Interpretation) - 30 semester hours

8. Outdoor Education Course Titles and Descriptions:

Introduction to Environmental Interpretation: An introduction to the philosophy and principles of the art of environmental interpretation. A comprehensive study of interpretive theory as it applies to the recreation and parks practitioner, and the varying settings within the professions.

Elements of Recreation and Park Planning: Basic recreation and park planning principles and processes, trends in area and facility development combine to form the basis for formulation of a relevant knowledge and philosophy of planning.

Methods of Environmental Interpretation: An orientation course in the methodology of the art of environmental interpretation as it relates to the recreation and parks profession settings.

Comprehensive Recreation Resources Planning: A critical examination of comprehensive recreation and natural resource planning theories and practices at major levels of government as well as the private sector and the area of consultant planning.

of Environmental Interpretation: A comprehensive study of the concept and values of environmental interpretation; its significance to modern society and role in the recreation and parks field.

Selected Topics: An examination of the problems of recreation resource management through a directed reading program and seminar. Student will study in depth problem areas of his specialization.

Special Problems: Directed individual comprehensive investigation of a special problem in the areas of recreation resource management and/or environmental interpretation. This results in the publication of a "major paper" which is generally a working document for a specific site or agency, e.g., conceptual master plan, interpretive prospectus, environmental impact or visitor use study.

9. Total Number of Students to Graduate to Date in Outdoor Education

Program(s):

128 B.S. - Recreation and Park Administration (Concentration in Resource Management)

25 M.S. - Recreation and Park Administration (Emphasis in Environmental Interpretation)

10. Approximate Number of Total Students in Various Degree Programs and Percentage of Those Students in Outdoor Education Program(s):

450 B.S. - Recreation and Park Administration

180 B.S. - Recreation and Park Administration (Concentration in Resource Management)

40% % of Student Enrollment in Outdoor Education Program(s)

11. Future Developments:

Plans for additional courses in interpretation are being studied.

12. Describe any field campus or Environmental Education center used in your program(s):

The historic site of Fort Rutledge (a 1776 era fort on the Clemson Campus) is being researched and will become a primary field laboratory for development of interpretive programming skills.

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THE UNIVERSITY OF TENNESSEE AT MARTIN

1. Name of Contact Person, Title, Location, Mailing Address, and Phone:

Dr. Philip E. Lavelly

Assistant Professor of Park and Recreation Administration

Natural Resources Management

The University of Tennessee at Martin

Martin, Tennessee 38238

Phone: 901/587-7021

2. Administrative Location:

School of Agriculture

3. Degree(s) Offered in Outdoor Education:

B.S. - Natural Resource Management (Concentration in Park and Recreation Administration with Emphasis in Environmental or Historical-Archaeological Interpretation)

4. Total Number of Faculty, Full-time and Part-time:

Full-time: 1

Part-time: 1

5. Faculty Status and Education of Outdoor Education Faculty, Full-time and Part-time:

Full-time:

Lavelly, Philip E. - Assistant Professor

B.S. - University of Georgia (Forestry)

M.S. - University of Georgia (Forest Recreation)

Ph.D. - Texas A&M University (Park & Recreation Resources Development)

6. Date Department Founded and Date Degree Program(s) Founded in Outdoor Education:

1927 - School of Agriculture

1973 - B.S. - Natural Resources Management (Concentration in Park and Recreation Administration with Emphasis in Environmental or Historical-Archaeological Interpretation)

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

B.S. - Park and Recreation Administration - 190 quarter hours

Concentration in Park and Recreation Administration with Emphasis in Environmental or Historical-Archaeological Interpretation - 24 quarter hours

8. Outdoor Education Course Titles and Descriptions:

Methods of Interpretation I: Introduction to principles and techniques used to communicate natural history, ecological features, and environmental awareness to park visitors. Includes methods of gathering, analysis, presentation of information and planning, construction, and use of audio-visual equipment, exhibits, and related interpretive devices.

Methods of Interpretation II: Continuation of the study of interpretive techniques including effective use of cultural artifacts, museum displays, and simulation of historical and cultural developments. Includes practical experience in a park setting in design, development, and effective use of interpretive methods. (Note: This course requires extensive field work with actual participation in interpretive programs such as living history, demonstrations, visitor center management and research at parks like Shiloh National Military Park.)

Fundamentals of Park and Recreation Administration: Development of organized recreation in public, private and commercial settings; role of recreation and parks in modern society including economic and social aspects; relationship of recreation and multiple resource use; status of parks and park systems and career opportunities.

Park Operation and Maintenance: Methods of operation of various park and recreation facilities for public use; elementary financial budgeting, personnel practices, job planning, scheduling of activities, and execution and supervision of field operations and maintenance for maximum efficiency.

Supervised Field Experience: Minimum of nine weeks of supervised study in an operational setting with an approved agency. Emphasis will focus on: application of principles of park and recreation administration; study of selected aspects of park management; and preparation of a comprehensive analysis of a specific problem. Joint evaluation by on-the-job and academic supervisors.

Park and Recreation Area Design: Principles of planning design, and layout of recreation areas and facilities with emphasis on space, scale, and arrangement for effective visitor use. Consideration of areas and facilities according to function, need, use, and spatial arrangement. Field trips.

Administrative Policies and Procedures: Administrative policies and procedures of park and recreation agencies, including legislative and legal foundations, boards and commissions, and organizational structure. The administrative process with application to parks, including leadership and decision making, financing, personnel, public relations and office management.

Approximately 24 credit hours from other courses in biology, zoology, plant sciences and the social sciences are selected to complete requirements for this option in addition to core curriculum course requirements.

9. Total Number of Students Graduated to Date in Outdoor Education

Program(s):

2 B.S. - Natural Resource Management (Concentration in Park and Recreation Administration with Emphasis in Environmental or Historical-Archaeological Interpretation)

10. Approximate Number of Total Students in Various Degree Programs and Percentage of Those Students in Outdoor Education Program(s):

Natural Resource Management Degree:

99 B.S. - Natural Resource Management (Concentration in Park and Recreation Administration with Emphasis in Environmental or Historical-Archaeological Interpretation)

50 Concentration in Park and Recreation Administration with Emphasis in Environmental or Historical-Archaeological Interpretation

50% % of Student Enrollment in Outdoor Education Program(s). 40% in Environmental Interpretation; 10% in Historical-Archaeological Interpretation.

11. Future Developments:

The University of Tennessee at Martin is considering setting aside a natural area on campus and developing a nature center and an arboretum for use by classes for interpretive purposes.

12. Describe any field campus or Environmental Education center used in your program(s)

Nature and Interpretation Center and Between the Lakes National Recreation Demonstration Area and several state parks in the Tennessee State Parks Division are used for field trip and laboratory purposes.

TEXAS A&M UNIVERSITY

Name of Contact Person, Title, Location, Mailing Address and Phone:

Dr. John W. Hanna

Assistant Professor

Department of Recreation and Parks

Texas A&M University

College Station, Texas 77843

2. Administrative Location:

Department of Recreation and Parks

College of Agriculture

3. Degree(s) Offered in Outdoor Education:

B.S. - Emphasis in Environmental Interpretation

M.S. - Emphasis in Environmental Interpretation

M.Agriculture - Emphasis in Environmental Interpretation

Ph.D. - Emphasis in Environmental Interpretation

4. Total Number of Faculty, Full-time and Part-time:

Full-time: 13

Part-time: 5

5. Faculty Status and Education of Outdoor Education Faculty, Full-time and Part-time:

Full-time:

Hanna, John W., Assistant Professor

B.S. - Colorado State University

Ph.D. - Texas A&M University

6. Date Department Founded and Date Degree Program(s) Founded in Outdoor Education:

1965 - Department of Recreation and Parks

1968 - Emphasis in Environmental Interpretation

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

B.S. - Emphasis in Environmental Interpretation - 135 semester hours

M.S. - Emphasis in Environmental Interpretation - 32 semester hours

M.Ag. - Emphasis in Environmental Interpretation - 40 semester hours

Ph.D. - Emphasis in Environmental Interpretation - 64 semester hours

8. Outdoor Education Course Titles and Descriptions:

Methods of Environmental Interpretation: Principles and techniques employed to communicate values, natural history, cultural features to visitors. The gathering, analysis, and presentation of information and the planning, construction and use of interpretive devices, exhibits, museums, and related outdoor facilities.

Interpretation and Management of Historic Areas: Philosophy, history and current management practices of administering areas for their cultural and historical significance in Texas and the United States. Field trip required.

Recreational Resources Communication: Study of the philosophies, concepts and techniques associated with communication and dissemination of information pertaining to use of natural resources for recreation.

9. Total Number of Students Graduated to Date in Outdoor Education Program(s):

25 B.S. - Emphasis in Environmental Interpretation

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- 2 M.S. - Emphasis in Environmental Interpretation
- 2 M.Ag. - Emphasis in Environmental Interpretation
- 1 Ph.D. - Emphasis in Environmental Interpretation

10. Approximate Number of Total Students in Various Degree Programs and Percentage of Those Students in Outdoor Education Program(s):

- 400 B.S.
- 25 B.S. - Emphasis in Environmental Interpretation
- 6% % of Student Enrollment in Outdoor Education Program
- 24 M.S.
- 4 M.S. - Emphasis in Environmental Interpretation
- 12.5% % of Student Enrollment in Outdoor Education Program
- 24 M.Ag.
- 4 M.Ag. - Emphasis in Environmental Interpretation
- 12.5% % of Student Enrollment in Outdoor Education Program
- 30 Ph.D.
- 4 Ph.D. - Emphasis in Environmental Interpretation
- 13.3% % of Student Enrollment in Outdoor Education Program

11. Future Developments:

Texas A&M University, Department of Recreation and Parks, is seeking to expand its environmental interpretation option by including two new proposed courses -- Interpretive Operations Planning and Management (undergraduate) and Interpretive Systems Planning and Analysis (graduate). Additionally, the department endeavors to establish cooperative education/work programs with organizations that incorporate interpretive services. The department also has an active interpretive related research program for graduate students.

12. Describe any field campus or Environmental Education center used in your program(s):

The Department jointly administers a 240 acre natural resource area with 3 other departments in the Institute of Renewable Natural Resources. This area, on the border of the campus, is used for ecology field courses and environmental interpretation labs.

BRIGHAM YOUNG UNIVERSITY

1. Name of Contact Person, Title, Location, Mailing Address and Phone:

Douglas Cloward

Director, Outdoor Education Leadership

Department of Youth Leadership and Outdoor Education

Brigham Young University

105 Richards Building

Provo, Utah 84601

Phone: 801/374-1211, Ext. 2593

2. Administrative Location:

College of Physical Education

3. Degree(s) Offered in Outdoor Education:

B.S. - Youth Leadership and Outdoor Education (Special Areas: youth agency leadership, professional scouting leadership, survival leadership, adventure leadership, outdoor education leadership)

4. Total Number of Faculty, Full-time and Part-time:

Full-time: 5

Part-time: 2

Teaching Assistants: 22

5. Faculty Status and Education of Outdoor Education Faculty, Full-time and

Part-time:

6. Date Department Founded and Date Degree Program(s) Founded in Outdoor

Education:

1958 - Scouting Education; other area emphasis in programs thereafter.

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

Boy Scout Leadership - 50-65 semester hours

Multiple Agency Leadership - 50-65 semester hours

Survival Leadership - 50-65 semester hours

Outdoor Education - 60-80 semester hours

Adventure Education - 50-65 semester hours

8. Outdoor Education Course Titles and Descriptions:

Principles of Camping: Elementary principles of outdoor camping, including cooking, sanitation, safety, and campmaking.

Outdoor Survival Field Activities: A study and lab experience in outdoor activities correlated to the lore of the American Indians.

Techniques of Outdoor Adventure: Advanced outdoor skills and camp program planning for youth leaders. American Camping Association certification possible.

Primitive Land Survival: Training to meet the adversity of primitive living without the use of modern equipment and facilities.

Teaching in the Outdoors: Development and use of outdoor teaching situations to implement the achievement of educational objectives.

Teaching in the Outdoors - Laboratory: Laboratory experience will occasionally require overnight participation by the student.

Outdoor Leadership Practicum: Administrative experience in positions of staff leadership with selected youth agencies.

Outdoor Survival: A living experience course in physical and emotional stress situations designed to produce positive interpersonal commitments.

Seminar:

9. Total Number of Students Graduated to Date in Outdoor Education Program(s):

100 B.S. - Youth Leadership and Outdoor Education

10. Approximate Number of Total Students in Various Degree Programs and Percentage of Those Students in Outdoor Education Program(s):

86 B.S. - Youth Leadership and Outdoor Education (Special area of Youth Agencies)

81 B.S. - Youth Leadership and Outdoor Education (Special area of Outdoor Education)

11. Future Developments:

We are working toward a public school teacher certification program in the area of outdoor education for both secondary and elementary age levels.

In cooperation with the Department of Continuing Education, we are working with church groups, school districts, and youth agency groups in outdoor education practicums.

12. Describe any field campus or Environmental Education center used in your program(s):

We are presently in the process of acquiring properties for such a field study area. However, the large areas of national forests, parks and BLM lands are readily available to us.

JOHNSON STATE COLLEGE

1. Name of Contact Person, Title, Location, Mailing Address and Phone:

Jack Smith, Director

Assistant Professor of Environmental Studies

Environmental Studies Program

Johnson State College

Johnson, Vermont 05656

Phone: 802/635/2356 Ext. 362

2. Administrative Location:

Professional Studies Division

3. Degree(s) Offered in Outdoor Education:

B.S. - Elementary Education (Concentration in Environmental Education)

M.S. - Elementary Education (Concentration in Environmental Education)

4. Total Number of Faculty, Full-time and Part-time:

Full-time: 3

Part-time: 12

5. Faculty Status and Education of Outdoor Education Faculty, Full-time and Part-time:

Full-time:

Smith, Jack, Assistant Professor of Environmental Studies

Director of Environmental Studies Program

B.S. - Union University (Science)

M.S. - University of Rhode Island (Medical Science)

M.A. - Earlham College (Philosophy and Religion)

--Papping, Mark, Associate Professor in Environmental Planning

B.S. - State University of New York (History)

Ph.D. - Emory University (Environmental Planning)

--Mixer, Richard, Instructor in Environmental Studies

B.S. - University of Michigan (Civil Engineering)

M.B.A. - University of Michigan (Business Administration)

6. Date Department Founded and Date Degree Program(s) Founded in Outdoor

Education:

1971 - Environmental Studies Program

1976 - B.S. - Elementary Education (Concentration in Environmental Education)

1976 - M.S. - Elementary Education (Concentration in Environmental Education)

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

B.S. - Education - 122 credit hours

Concentration in Environmental Education - 24 credit hours

M.S. - Elementary Education - 30 credit hours

8. Outdoor Education Course Titles and Descriptions:

Vermont Ecology:

Introduction to Northern Environments:

Recreational Planning:

Introduction to Planning:

Park Planning and Administration:

Environmental Education Internship:

9. Total Number of Students Graduated to Date in Outdoor Education

Program(s):

- 2 B.S. - Elementary Education (Concentration in Environmental Education)
- 1 M.S. - Elementary Education (Concentration in Environmental Education)

10. Approximate Number of Total Students in Various Degree Programs and

Percentage of Those Students in Outdoor Education Program(s):

- 85 B.S. - Elementary Education (Concentration in Environmental Education)
- 8% % of Student Enrollment in Outdoor Education Program
- 1 M.S. - Elementary Education (Concentration in Environmental Education)

11. Future Developments:

The Environmental Studies Program at Johnson State College has several degree tracks -- environmental education, environmental science, environmental planning, environmental administration, and a liberal arts environmental studies track. Most of these involve joint efforts with other departments and programs on campus. The environmental education tracks are offered at the bachelors and masters level. At the B.S. level, students as regular elementary education majors take a 24 credit concentration of courses in environmental studies (we offer 120 credits of courses in environmental studies). Several of our students have done internships with the State Education Department doing environmental education curricular development and field testing.

At the M.S. level, students in our program in education specialize in environmental education. Here they take some course work in environmental studies such as Winter Ecology, and do their masters project in environmental education. For instance, our first graduate received a grant to develop an environmental education resource center for a nearby school district. He had earlier designed this center for a project required in one of his regular education courses. As you can see, we are able to work closely with the education faculty and their programs. We expect in the future to continue these directions.

12. Describe any field campus or Environmental Education center used in your program(s):

Our campus is on a 450 acre tract which has a considerable wooded area available for outdoor education. We also have the Babcock Nature Preserve, a 1200 acre area, now being developed for research and teaching. This area includes three lakes and is mostly forested. It is thirty minutes from campus.

UNIVERSITY OF WASHINGTON

1. Name of Contact Person, Title, Location, Mailing Address and Phone:

Dr. Roger G. Olstad

Professor, Science & Environmental Education

College of Education

University of Washington

Seattle, Washington 98195

Phone: 206/543-1847

2. Administrative Location:

College of Education

3. Degree(s) Offered in Outdoor Education:

M.Ed. - Curriculum & Instruction: Environmental Education

4. Total Number of Faculty, Full-time and Part-time:

Full-time: 4

Part-time: 1

5. Faculty Status and Education of Outdoor Education Faculty, Full-time and Part-time:

Olstad, Roger G., Professor, Science Education

B.S. - University of Minnesota (Natural Science - Biology)

M.A. - University of Minnesota (Science Education)

Ph.D. - University of Minnesota (Science Education)

--Smith, John P., Professor, Science Education

B.A. - University of Missouri (Geology)

M.Ed. - University of Missouri (Secondary School Administration)

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Ed.D. - Stanford University (Science Education)

--Guise, Emmett E., Assistant Professor of Education

A.B. - University of California (History, Political Science)

M.Ed. - University of Utah (Curriculum & Instruction)

Ph.D. - University of Utah (Curriculum & Instruction)

6. Date Department Founded and Date Degree Program(s) Founded in Outdoor Education:

1974 - no separate department

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

Natural/Social Sciences - 24 credit hours

Education (Environmental focus) - 15 credit hours

Thesis/Non-Thesis Option - 9 credit hours

8. Outdoor Education Course Titles and Descriptions:

Field Study (Environmental Education):

Independent Study (Environmental Education):

Independent Study and Research (Environmental Education):

9. Total Number of students Graduated to Date in Outdoor Education Program(s):

12 M.Ed. - Curriculum & Instruction: Environmental Education

10. Approximate Number of Total Students in Various Degree Programs and Percentage of Those Students in Outdoor Education Program(s):

5% % of Student Enrollment in Outdoor Education Program(s)

11. Future Developments:

Unknown; the program is relatively new and we will be working to establish its foundations.

12. Describe any field campus or Environmental Education center used in your program(s):

The program has the resources of a large University available to it, including the Friday Harbor Biological Station, the University Arboretum, the Pack Experimental Forest, and other similar facilities which contribute to the total program.

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UNIVERSITY OF WISCONSIN - GREEN BAY

1. Name of Contact Person, Title, Location, Mailing Address and Phone:

Dr. Robert S. Cook

Associate Professor of Science & Environmental Change

ES 307

University of Wisconsin - Green Bay

Green Bay, Wisconsin 54302

Phone: 414/465-2427

2. Administrative Location:

College of Environmental Sciences

3. Degree(s) Offered in Outdoor Education:

B.S. - Science and Environmental Change (SEC) (Emphasis in nature communication program and Leisure Science Collateral)

M.S. - Environmental Arts & Sciences (Emphasis in Environmental Education)

4. Total Number of Faculty, Full-time and Part-time:

Full-time: 0

Part-time: The program is distributed throughout several academic areas and depends upon the special interests of the students.

5. Faculty Status and Education of Outdoor Education Faculty, Full-time and Part-time:

6. Date Department Founded and Date Degree Program(s) Founded in Outdoor Education:

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1969 - B.S. - Science and Environmental Change and Leisure Science

Collateral

1975 - Emphasis in Nature Communication

1975 - M.S. - Environmental Arts & Science (Emphasis in Environmental Education)

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

B.S. - Science and Environmental Change - 124 semester hours

Emphasis in Nature Science Communication & Leisure Science Collateral -
24 semester hours

M.S. - Environmental Arts & Science (Emphasis in Environmental Education) -
30 semester hours

8. Outdoor Education Course Titles and Descriptions:

Developing Environmental Education Materials for the School:

Introduction to Environmental Education:

Independent Study in Environmental Education Techniques and Nature

Center Management:

Internships at Nature Centers and Environmental Education Centers:

9. Total Number of Students Graduated to Date in Outdoor Education Program(s):

3 B.S. - Science and Environmental Change (Emphasis in nature communication program and Leisure Science Collateral)

10. Approximate Number of Total Students in Various Degree Programs and Percentage of Those Students in Outdoor Education Program(s):

10 B.S. - Science and Environmental Change (Emphasis in nature communication program and Leisure Science Collateral)

3 M.S. - Environmental Arts & Sciences (Emphasis in Environmental Education)

11. Future Developments:

Both the undergraduate and graduate programs are designed to give the student maximum flexibility to emphasize their greatest academic interests. Areas of emphasis may be as varied as nature study in centers, urban ecology, formal K-12 programs, or incorporation of an educational dimension in parks, recreation areas or school grounds.

12. Describe any field campus or Environmental Education center used in your program(s):

While UW-GB does not have a camp of its own, cooperative programs with several fine environmental education centers across the United States have been developed for independent study, internships and temporary employment. Thus valuable practical experience is made available to most students depending on their interests and suitability.

UNIVERSITY OF WISCONSIN - STEVENS POINT

1. Name of Contact Person, Title, Location, Mailing Address and Phone:

Dr. Daniel Trainer, Dean
College of Natural Resources
University of Wisconsin - Stevens Point
Stevens Point, Wisconsin 54481
Phone: 715/346-2656

2. Administrative Location:

College of Natural Resources

3. Degree(s) Offered in Outdoor Education:

B.S. - Resource Management (Concentration in Environmental Education)
B.S. - Resource Management (Concentration in Environmental Interpretation)
Minor in Outdoor Education
M.S. - Resource Management (Concentration available in Outdoor Education,
Environmental Education, Environmental Interpretation)

4. Total Number of Faculty, Full-time and Part-time:

Full-time: 4

Part-time: 2

5. Faculty Status and Education of Outdoor Education Faculty, Full-time
and Part-time:

Full-time:

Wievel, Bernard, Professor

B.E. - University of Wisconsin - Platteville

M.S. - Iowa State University

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Ph.D. - Iowa State University

--Roggenbuck, Joseph, Assistant Professor

B.S. and M.S. - University of Michigan

Ph.D. - Utah State University

--Korth, Irv, Associate Professor

B.S. - University of Wisconsin - Stevens Point

M.S. - University of Wisconsin - Madison

--Wilke, Richard, Director, Central Wisconsin Environmental Station

B.S. and M.S. - University of Wisconsin - Stevens Point

Part-time:

Wood, Roger, Professor

B.S. - University of Wisconsin - Stevens Point

M.S. and Ph.D. - University of Wisconsin - Madison

--Schmatz, Robert, Professor

B.A. - State University of New York

M.S. - Southern Illinois University

Ed.D. - Michigan State University

6. Date Department Founded and Date Degree Program(s) Founded in Outdoor

Education:

1947 - Conservation Department, predecessor to College of Natural Resources

1964 - Minor in Outdoor Education

1970 - B.S. - Resource Management (Concentration in Environmental Interpretation)

1947 - B.S. - Conservation Education, predecessor to present Environmental Interpretation concentration

1970 - M.S. - Resource Management (Concentration in Outdoor Education, Environmental Education or Environmental Interpretation)

7. Credit Hour Requirement in Outdoor Education Degree Program(s):

B.S. - Resource Management - 124 credit hours

Minor in Outdoor Education - 22 credit hours

M.S. - Resource Management - 30 credit hours

8. Outdoor Education Course Titles and Descriptions:

Organization and Administration of Outdoor Education: Objectives, scope, and administrative aspects of outdoor education in the curriculum, including the role of school forests, day camps, school gardens, community resources, and other outdoor educational techniques.

Techniques of Outdoor Education: Materials, methods, planning and curriculum development as applied to outdoor education, including practicum experiences.

Outdoor Education Practicum: Practical experiences at an Environmental Center. Includes work in each of the following areas: teaching, scheduling, food service, maintenance, and organization. Students will be required to work one full day each week.

Workshop in Education: Developing Outdoor Teaching Materials: Problems of teaching in various curricular fields in the elementary school. A subtitle will be added to describe the area considered each time the course is offered.

Introduction to Environmental Study: A study of the natural, social, and economic factors influencing the quality of man's environment, including ecological relationships and principles and their

relation to population growth, pollution, resource allocation and depletion, conservation, technology, and urban and rural planning.

Environmental Field Studies: Environmental and Natural History study as a background to the use of the outdoors as a teaching laboratory. One hour lecture, four hours of laboratory per week. Not open to majors or minors in the College of Natural Resources.

Environmental Interpretation Methods: Methods for revealing the significance of natural and human history to visitors at parks, recreation areas, museums, and other institutions; verbal and non-verbal methods explored in relation to interpretive signs, trails, exhibits, and visitor centers; philosophical and theoretical aspects of interpretation.

Camp Leadership: Theory and practice in campcrafts, problems of cabin living, counselor training, waterfront laboratory, nature study, handicrafts and special projects; field trips and supplementary reading.

9. Total Number of Students Graduated to Date in Outdoor Education Program(s):

450 Students have graduated with degrees in Outdoor Education programs.

10. Approximate Number of Total Students in Various Degree Programs and Percentage of Those Students in Outdoor Education Program(s):

There are over 1300 students with majors in the College of Natural Resources. Figures on present number in Outdoor Education program are not currently available.

11. Future Developments:

The University of Wisconsin - Stevens Point offered the first degree in Conservation education in 1947. Since that year the College of Natural Resources has experienced growth in student numbers and academic programs

available. Recent developments have included the introduction of numerous interdisciplinary courses dealing with the environment. The outdoor education, environmental education, and environmental interpretation programs have all had new courses recently added. The University of Wisconsin - Stevens Point obtained and developed an Environmental Education Station during 1975. This Station is able to offer practical experiences to students enrolled in the outdoor education, environmental education and/or environmental interpretation programs.

12. Describe any field campus or Environmental Education center used in your program(s):

a) Clam Lake Field Station located in northern Wisconsin provides field experiences related to wildlife management, forestry, water resources, fisheries, and soils. Students generally attend Clam Lake during the summer between their sophomore and junior years.

b) Central Wisconsin Environmental Station: The Colleges of Natural Resources and Professional Studies at the University of Wisconsin - Stevens Point Foundation, Inc. have developed the Central Wisconsin Environmental Station located 17 miles east of Stevens Point. Since the Station began operating during the spring of 1975, it has sought to provide a foundation for the study of ecological principles and concepts as they relate to people and their environment. The Environmental Station, located on Sunset Lake, had previously served as a Boy Scout Camp for over 50 years.

The Station has access to over 500 acres of diverse Wisconsin landscape for study. Numerous ecological communities such as coniferous and

deciduous forests, bogs, fields, ponds, and four lakes are within easy walking distance of the Station. Facilities include housing units for groups up to 55; dining facilities; food service if requested; miles of rambling, hiking trails; interpretive nature trails; a complete waterfront; and ample room for meetings and conferences.

The facilities, program and staff of the Station are available for use on a daily, weekly, or extended basis. The Station has offerings for students at all levels, special training for teachers, and programs and special meeting facilities for public organizations.

During the academic year the Station provides environmental education activities for K-12 students. At the same time, the Station provides an outdoor laboratory for students from the University of Wisconsin - Stevens Point. Students majoring or minoring in Resource Management, Outdoor Education, Elementary Education, Forestry, Wildlife, Soils, and Water serve as the instructional staff at the Station. UW - SP students are able to obtain practical experiences and earn credits while working in the areas of outdoor education, environmental education, and environmental interpretation at the Station.

Although the CWES has only been in operation since May of 1975, it has already logged over 12,000 visitor days. In addition to the K-12 programs, pre-service and in-service teacher training programs, regional environmental education workshops and conferences are being planned by the Station's staff.

VITA

Russel E. Bachert, Jr., author of this document, has been active in outdoor education for over twelve years. His formal academic preparation includes a B.S. in Elementary Education, Millersville State College, Pa.; M.S. in Outdoor Teacher Education, Northern Illinois University; M.S. in Park and Recreation Administration and Ed.D. in Adult Education/Park and Recreation Administration, Indiana University. He is the author of several outdoor education books and acts as director of the National Wildlife Federation Wildlife Camp each summer. Presently he serves as Assistant Professor of Outdoor/Environmental Education and Director of Piney Lake Field Campus for the University of North Carolina at Greensboro.